

**ENVIRONMENTAL ASSESSMENT**

**FOR**

**COLEY ROAD / BARNES CROSSING  
ROADWAY PROJECT**

**FROM**

**(McCULLOUGH BOULEVARD to GLOSTER STREET)  
TUPELO, MS**

\_\_\_\_\_  
DATE REVIEWED

\_\_\_\_\_  
NATCHEZ TRACE PARKWAY

\_\_\_\_\_  
RECOMMENDED

\_\_\_\_\_  
SUPERINTENDENT,  
NATCHEZ TRACE PARKWAY

## **INTRODUCTION**

This Environmental Assessment (EA) is prepared to outline the effects on the environment by the construction of a proposed major thoroughfare arterial extending and connecting Coley Road from McCullough Boulevard to Highway 78 (future Interstate 22) and Barnes Crossing Road from North Gloster Street to the same location on Highway 78.

The project will serve as a connector between the heavily populated west side of Tupelo and fast growing retail area of Barnes Crossing on the north side of Tupelo. This road will also function to provide out of town traffic from west of the region access to the area. All motorists traveling from the west side of town to the Barnes Crossing area currently have to come through town and travel down the heavily congested Gloster Street. The proposed project will include a grade separated crossing at the Natchez Trace Parkway, a grade separated interchange at Highway 78, and an at grade intersection at Mount Vernon Road. The route for the proposed road is primarily undeveloped farmland and crosses both Town Creek and Yonaba Creek. The total project length is a distance of approximately 23,200 ft. (4.4 mile).

## TABLE OF CONTENTS

I.	Purpose and Need for Action	6	
	A.	Description of Proposed Action	6
	B.	Need for Proposed Action	6
		Project Map	
	C.	Decisions to be Made	8
	D.	Scoping and Impact Topics	8
	E.	Methodology	11
II.	Alternatives	13	
	Description of Alternatives	13	
	Map of Alternatives	15	
III.	Affected Environment	20	
	A.	General Environmental Setting	20
	B.	Natural Resources	20
		1. Vegetation	20
		2. Threatened and Endangered Species	20
		3. Wildlife	20
		4. Wetlands	20
	C.	Physical Environment	21
		1. Air Quality	21
		2. Water Quality	21
		3. Soils	21
		4. Noise	22
		5. View Shed	22
		6. Floodplain	22

D.	Socio-Economic Environment	22
E.	Cultural Resources	22
F.	Parkway Visitor Use and Experience	22
IV.	Environmental Analysis	23
A.	Natural Resources	23
1.	Vegetation	23
2.	Threatened and Endangered Species	23
3.	Wildlife	24
4.	Wetlands	25
B.	Physical Environment	26
1.	Air Quality	26
2.	Water Quality	26
3.	Soils	27
4.	Noise	27
5.	View Shed	28
6.	Flood Plains	29
7.	Night Sky	30
C.	Socio-Economic Environment	31
D.	Cultural Resources	31
1.	Archeological Resources	31
2.	Historic Resources	32
E.	Parkway Visitor Use and Experience	32
F.	Energy Requirements and Conservation	33
G.	Depletion of Natural Resources	33
H.	Cumulative Impacts	34
I.	Irreversible or Irrecoverable Commitment of Resources	35

V.	Consultation / Coordination and Permitting	36
VI.	Environmentally Preferred Alternative	37
VII.	Environmental Commitments	38
VIII.	Appendix A - Documentation of Agency Consultation	
IX.	Appendix B - Statement of Findings, Wetlands	
IX.	Appendix C - Statement of Findings, Floodplains	

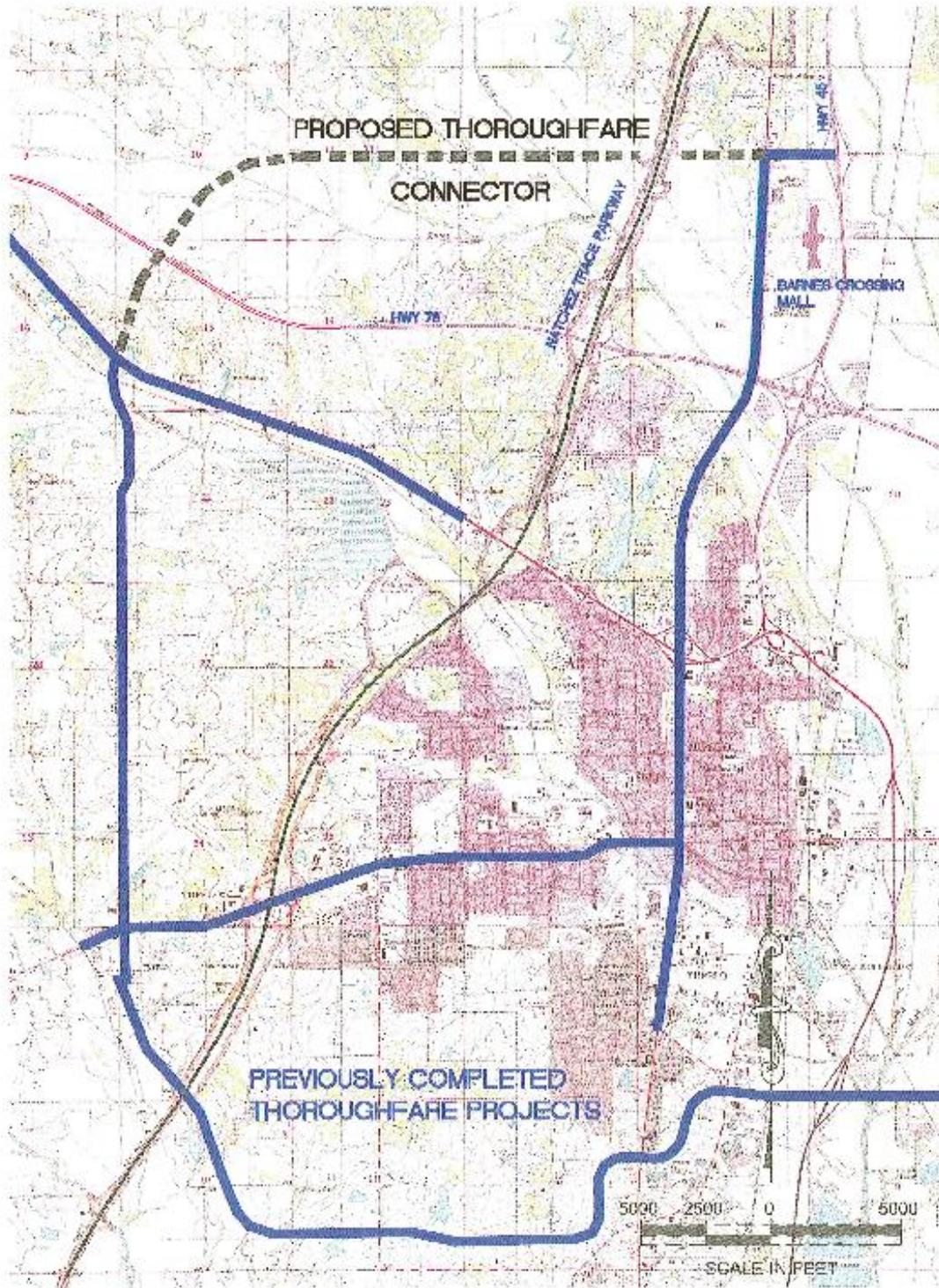
## **I. PURPOSE OF AND NEED FOR ACTION**

### **A. Description of Proposed Action**

The City of Tupelo, Mississippi is proposing to construct an arterial facility from the existing north terminus of Coley Road (@ McCullough Boulevard) to the existing west terminus of Barnes Crossing Road (@ North Gloster Street / Highway 145). The construction of this section of roadway would complete an outer loop around the heart of the City of Tupelo. With the inclusion of an overpass and interchange at the intersection of Highway 78, this roadway would also provide out of town traffic entering Tupelo from the west access to the north side of town and a way to bypass the heavily congested heart of the city. The purpose of this Environmental Assessment (EA) is to obtain a right of way to cross the Natchez Trace Parkway.

### **B. Need for Proposed Action**

The benefits to be provided by the construction of this facility are numerous. By providing an alternate access route to the north side of town, and specifically the Barnes Crossing retail district, this project would relieve much of the congestion on the existing routes to this area. As stated previously, this includes North Gloster Street as well as U.S. Highway 45. The first effect of this would be safer access to the area for all available routes. Also, the quicker access and reduced congestion provided by this project would result in more fuel efficiency and less pollution to the environment. This roadway would also serve as a connector for the current and future developments in the Mount Vernon area which currently have to travel an existing inadequate road. The City of Tupelo, in conjunction with the Mississippi Department of Transportation, has conducted a Benefit / Cost Analysis for the proposed project. Based on the benefit / cost ratio of 6.45 as calculated in the analysis, it would seem that the implementation of this project would provide needed and long lasting benefits for the citizens of Tupelo and the many commuters from the surrounding region who come to this community to work or shop. The construction of the facility could also extend the life of the existing interchanges at U.S. Highway 78 and 45 and at U.S. Highway 45 and Barnes Crossing Road by alleviating congestion during peak hours and reducing levels of service. This facility would also reduce the amount of commuter and collector traffic using the Natchez Trace Parkway as a bypass to the busier routes in and around the City of Tupelo. As the City of Tupelo and surrounding areas continue to develop, the amount of traffic and congestion in this area will continue to increase, including local traffic on the Natchez Trace Parkway. The completion of this loop bypass will be an effective way to alleviate existing traffic problems and also avoid future problems. The construction of this thoroughfare will necessitate crossing the Natchez Trace Parkway because the Parkway completely splits the two sections of town that the roadway will serve. Approximately 200,000 to 300,000 sq. ft. of Park land could be impacted.



### **C. Decisions to be Made**

In accordance with The National Environmental Policy Act of 1969 (NEPA) this EA has been prepared to provide the required environmental and socioeconomic analysis for the proposed work. Alternatives and options for accomplishing the work have been evaluated for potential impact to Park resources and Park visitors as well as the environment in general.

After the alternatives have been evaluated and the public has had an opportunity to review and comment on the proposed action, a decision will be made on how to proceed with the proposed action.

### **D. Scoping and Impact Topics**

Local public and agency involvement has been utilized in the scoping efforts for the development of this EA. On August 8, 2006 Mr. Greg Pirkle and Mr. Ernest Joyner of the Tupelo Major Thoroughfare Committee met with Mr. Stennis Young, Acting Superintendent, and other Natchez Trace Parkway personnel to discuss the proposed Coley Road / Barnes Crossing Road project that is planned to cross the Natchez Trace Parkway at approximately milepost 265. The Tupelo Major Thoroughfare Committee is a citizen oversight committee which oversees the activities of the City of Tupelo Major Thoroughfare Program. At this meeting, the discussion included the Parkway's interpretation of the National Environmental Policy Act (NEPA), National Historic Preservation Act, and the right-of-way process as it relates to the Parkway. At this time the committee members were made aware that a minimum of an Environmental Assessment (EA) was required and different elements of the EA were discussed. This meeting was followed up by letters and another meeting. Specific issues and concerns related to the proposed project's affect on the environment and the Parkway have been identified for evaluation. The potential affect on natural resources in areas such as wetlands, floodplains, soils, water quality, special status species, vegetation, wildlife habitat, paleontology and Native American interests, as well as potential impacts on the integrity of Parkway use and operations, are areas of concern. This meeting was followed up by a meeting with several more members of the Thoroughfare Committee, John Crawley, City Engineer for the City of Tupelo, Phillip Harbor, Major Thoroughfare Project Manager for the City of Tupelo Public Works Department, John White, Project Engineer with Engineering Solutions, Inc., and Natchez Trace Parkway staff including Mr. Stennis Young, Mr. Craig Stubblefield, Mr. Kurt Foote and others. At this meeting, the requirements of the EA were discussed in greater detail and the review process and public hearing process were laid out. It was decided that Engineering Solutions, Inc., would work with the Natchez Trace Parkway staff in developing the EA.

Following is the rationale behind the selection of the impact topics which are included and discussed in the evaluation sections of this report:

1. Wetlands

According to a preliminary wetland delineation report performed by Herring Environmental, LLC, there are 10 streams (2,190 feet) and 5 wooded wetlands (16.45 acres) within or near the proposed work area that appear to meet US Army Corps of Engineers jurisdictional criteria. Once an Alternative has been agreed upon and the alignments established, the US Army Corps of Engineers and MDEQ will be contacted to obtain permission to impact those areas if necessary. In addition to the wetlands identified by the Army Corps of Engineers criteria, four Cowardin wetland types have been identified within the Park boundary totaling 4.44 acres. A Statement of Findings for Wetlands has been performed in accordance with Director's Order 77-1, Wetlands. (See Appendix B, Statement of Findings-Wetlands.)

2. Floodplains

Much of the proposed project area lies within the 100 year flood plain according to the National Flood Insurance Program maps. A Floodplain Statement of Findings has been performed in accordance with Director's Order 77-2, Floodplains. (See Appendix C, Statement of Findings-Floodplains.)

3. Soils

Since the proposed project includes excavation and embankment operations, each alternative has been assessed for evaluation. This issue will be discussed further in the document.

4. Water Quality

Since the proposed project crosses several streams, it has the potential to impact water quality. This issue will be discussed further in the document.

5. Special Status Species

Section 7 of the Endangered Species Act directs all Federal agencies to use their authority in furtherance of the purposes of the Act by carrying out programs for the conservation of rare, threatened, and endangered species. Federal agencies are required to consult with the U.S. Fish and Wildlife Service to ensure that any actions authorized, funded, and/or carried out by the agency does not jeopardize the continued existence of any listed species or critical habitat. This issue will be discussed further in the document.

6. Cultural Resources

Federal agencies are required by Federal law to consider the effects of their proposed actions on cultural resources. A cultural resources survey has been performed as a part of this assessment and will be discussed further in the document.

7. Parkway Viewshed Impacts

The National Park Service has determined that the Natchez Trace Parkway meets the criteria of eligibility for the National Register of Historic Places. The setting of the Natchez Trace Parkway is managed to ensure that Park visitors are afforded a continuous, serene and recreational travel experience. Perpetuation of these characteristics of the Parkway's cultural landscape is an important consideration of the project. An assessment of the effect that the proposed project would have on the Parkway is included in the document.

8. Vegetation

Since projects of this scope and magnitude can have possible impacts on native vegetation, each alternative has been assessed for evaluation.

9. Wildlife

Due to the abundance of wildlife known to exist in the surrounding area, each alternative has been evaluated for affect to wildlife in the project area.

10. Air Quality

Air quality is an important factor in regard to health and quality of life issues. Therefore, each alternative has been assessed for evaluation.

11. Noise

Noise associated with the proposed project is another factor which could have a possible impact on the local environment. Therefore, each alternative has been assessed for evaluation.

12. Night Sky (Light Pollution)

The Build Alternatives will likely result in an increased number of vehicles crossing the Parkway at night. Therefore, each alternative will be analyzed for its potential negative impact upon night sky resources.

Several issues commonly associated with Environmental Assessments were excluded from this report for the following reasons:

*Relocation Impacts* are excluded because no relocation of homes, businesses, or commercial facilities is associated with the proposed project.

*Social Impact / Environmental Justice* is excluded because the project will serve the entire community while providing better and safer access to existing streets, neighborhoods, and business districts.

*Joint Development* is excluded because there are no joint development measures proposed for the project.

*Water Body Modifications* are excluded because there is no modification of water bodies anticipated with the project.

*Wild and Scenic Rivers* are excluded because there are no wild or scenic rivers located within the project area.

*Coastal Barriers / Coastal Zone Impacts* are excluded because there are no coastal zones in this area.

*Hazardous Wastes* are excluded because there is no hazardous waste associated with the project and no hazardous waste sites will be affected by the project.

*Native American (Chickasaw) Impacts* are excluded because a cultural resource assessment performed indicated no adverse affect associated with the proposed project.

*Parkway Operations (Patrols / Maintenance)* Parkway operations are excluded because patrol and maintenance operations will not be permanently impacted by the proposed project.

*Paleontology* is excluded because no potential impacts were indicated following reviews of federal and state agency information sources.

## **E. Methodology**

Each Impact Topic chosen for environmental analysis is assessed for each alternative in terms of context, intensity, duration, type and focus. Following are descriptions of the terminology used in the assessments.

### Context

Site specific - Impacts the project site only.

Local - Impacts the surrounding community.

Regional - Larger scale impacts beyond the surrounding area.

### Intensity

Negligible - Little or no impact (not measurable).

Minor - Changes or disruptions may occur, but does not result in a substantial resource impact.

Major - Easily defined and measurable. Results in a substantial resource impact.

### Duration

Short Term - Impact lasts only for the duration of the project or short time after. No permanent impacts anticipated.

Long Term - Impact lasts well beyond the duration of the project and may result in a permanent impact.

### Type

Beneficial - Impact has positive affect on the environment, community or region.

Adverse - Impact has a negative affect on the environment, community or region.

### Focus

Direct - An impact that is a result of the construction and/or existence of the completed project.

Indirect - An impact that is a result of some other activity resulting from or associated with the project.

## **II. ALTERNATIVES**

### **A. No Action Alternative 1**

This alternative would consist of a “no-build” situation. This alternative would provide no relief of traffic congestion and will not address the immediate need for a safe and economical bypass route around the northern side of the City of Tupelo. The current situation creates unsafe traffic flows (including traffic on the Natchez Trace Parkway), and creates a hazard to the public, especially during peak times of traffic flow to and from the Barnes Crossing retail shopping area.

### **B. Build Alternative 2 (Environmentally & Parkway-Preferred Alternative)**

This alternative would consist of building a new roadway from McCullough Boulevard to the intersection of North Gloster Street and Barnes Crossing Road with a bridge overpass and interchange at Highway 78 and a bridge overpass at the Natchez Trace Parkway. This alignment would connect the existing extension of Coley Road and the proposed extension of Barnes Crossing Road, resulting in a direct connection with both Highway 78 and Highway 45. (See Alternative 2 Exhibits on pages 15 and 16.)

### **C. Build Alternative 3**

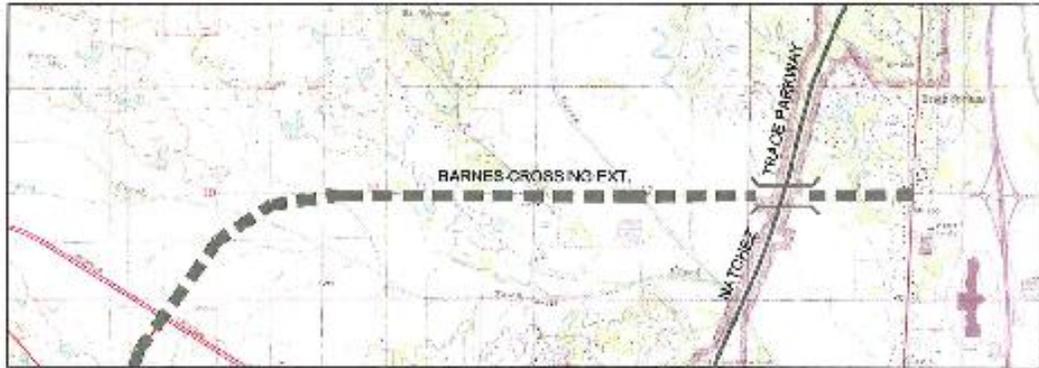
This alternative would consist of building a new roadway from McCullough Boulevard to the intersection of North Gloster Street and Barnes Crossing Road with a bridge overpass and interchange at Highway 78 and an underpass at the Natchez Trace Parkway. This alignment would also connect the existing extension of Coley Road and the proposed extension of Barnes Crossing Road, resulting in a direct connection with both Highway 78 and Highway 45. (See Alternative 3 Exhibits on pages 15 and 17.)

### **D. Build Alternative 4**

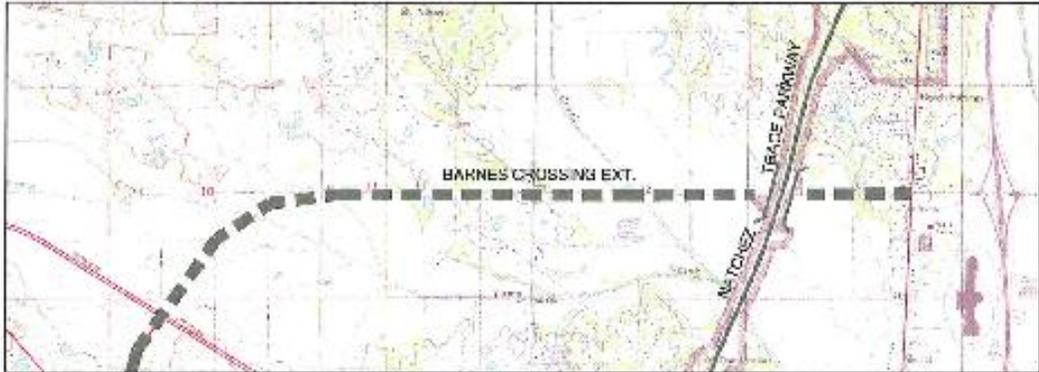
This alternative would consist of building a new roadway from McCullough Boulevard to the northern end of Beech Springs Road with a bridge overpass and interchange at Highway 78 and replacing an existing underpass at the intersection of Beech Springs Road and the Natchez Trace Parkway. This alternative would require the reconstruction of Beech Springs Road from the connection of the new roadway to the intersection at North Gloster Street. (See Alternative 4 Exhibits on pages 15 and 18.)

### ALTERNATIVES CONSIDERED BUT REJECTED

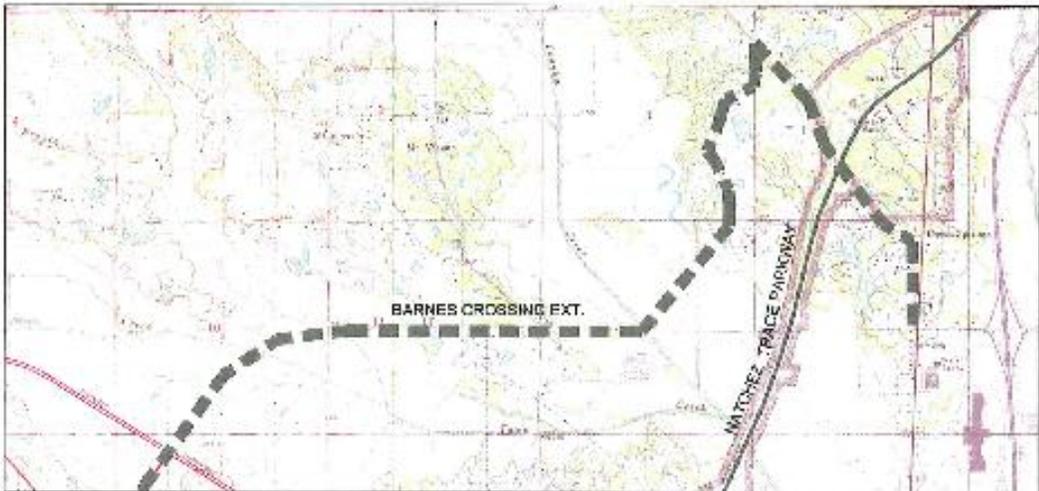
Direct access from the new roadways considered in Build Alternatives 2 or 3 to the Natchez Trace Parkway, via grade-separated interchange ramps, was considered but rejected because of non-compliance with National Park Service and Natchez Trace Parkway design guidelines. Among the design criteria specifically stipulated for national parkways are: a) Eliminate major grade crossings (crossing intersections with the parkway motor road itself, and b) Have entrance and exit points spaced at distant intervals to reduce interruptions to the main traffic flow. Overall, the Natchez Trace Parkway is a limited access recreational motor road which already allows for six at-grade interchanges within the Tupelo city limits. The parkway has chosen not to consider any alternative that would add another interchange to the parkway as it winds through Tupelo.



ALTERNATIVE 2



ALTERNATIVE 3

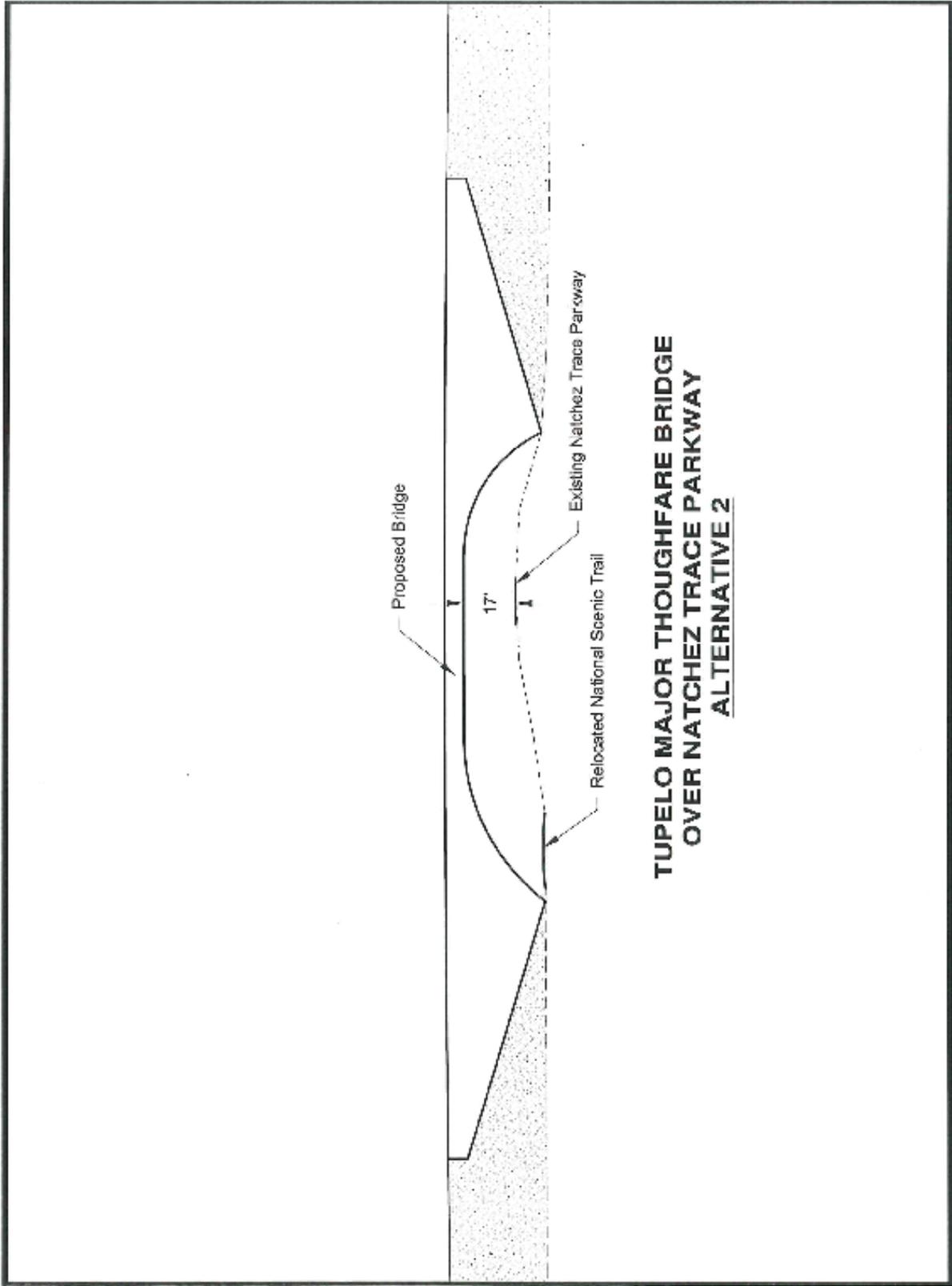


ALTERNATIVE 4









**TUPELO MAJOR THOUGHFARE BRIDGE  
OVER NATCHEZ TRACE PARKWAY  
ALTERNATIVE 2**

### **III. AFFECTED ENVIRONMENT**

#### **A. General Environmental Setting**

The project area is located in northeastern Mississippi, in a mixed rural and urban landscape. The project crosses the Natchez Trace Parkway, which is approximately 444 miles in length, and crosses three states between Natchez, Mississippi and Nashville, Tennessee.

The total acreage of the Parkway includes 51,680.64 acres of Federal land and 69.51 acres of non-Federal land, for a total acreage of 51,750.15 acres. The approximate acreage of Parkway property to be affected by the proposed project is 4.5 to 9 acres depending on the alternative chosen.

The climate of northeastern Mississippi is generally mild with moderate temperature extremes. Winter is normally cold and damp with occasional warm periods. Spring and fall are generally mild. Summers are hot and humid.

#### **B. Natural Resources**

##### **1. Vegetation**

The majority of the project area is composed of cultivated farm land with small pockets of mixed hardwood-dominated upland areas. The park right-of-way section is predominately converted crop-land with native grasses and planted trees (approximate heights from 3 to 6 feet).

##### **2. Threatened and Endangered Species**

Upon consulting with the U.S. Fish and Wildlife Service it was determined that the federally protected plant, Price's potato bean (*Apios priceana*), might be supported by habitat found within the proposed project area. Therefore a survey was performed for the presence of this species of threatened plant.

##### **3. Wildlife**

Parkland and other local lands provide habitat for a wide variety of wildlife species. Principle mammals include deer, rabbits, squirrels, opossums, and raccoons. A variety of birds are also found locally and along parklands. These include mourning doves, mockingbirds, blue jays, cardinals, woodpeckers, and quail. Reptiles and amphibians also occur within the proposed project area.

##### **4. Wetlands**

According to a preliminary wetland delineation report performed by Herring Environmental, LLC, there are 10 streams (2,190 feet) and 5 wooded wetlands

(16.45 acres) within or near the proposed work area that appear to meet US Army Corps of Engineers jurisdictional criteria. In addition to the wetlands identified by the Army Corps of Engineers criteria, four Cowardin wetland types have been identified within the Park boundary totaling 4.44 to 9 acres depending on the alternative chosen.

## **C. Physical Environment**

### **1. Air Quality**

The State of Mississippi monitors for PM10 particulates, ozone, carbon monoxide, sulfur dioxide, lead, and acid precipitation. The State does not monitor for nitrogen oxide. According to the Mississippi Department of Environmental Quality, Office of Pollution Control, the State has been in attainment for all criteria pollutants since the inception of the monitoring program. Attainment indicates that a criteria air pollutant meets acceptable health-based levels of the national ambient air quality standards.

### **2. Water Quality**

The latest State of Mississippi water quality criteria for intrastate, interstate, and coastal waters, adopted August 23, 2007 by the Mississippi Commission on Environmental Quality, specifies general and minimum conditions based upon use. Minimum conditions applicable to all waters shall meet parameters for criteria including dissolved oxygen, pH, temperature, and toxic substances. The proposed project crosses Yonaba Creek and Town Creek as well as Union Branch of Town Creek and several minor tributaries. These streams are located in the Tombigbee River Basin. The creeks listed above are classified as fish and wildlife streams with some of the tributaries classified as ephemeral streams. Waters in the *Fish and Wildlife* classification are intended for fishing and for propagation of fish, aquatic life, and wildlife. Minimum conditions for these waters shall meet parameters for criteria including bacteria, specific conductance, and dissolved solids. Although comparative or analytic data is not available for this assessment, it is assumed that the quality of these waters meets or exceeds the state criteria.

### **3. Soils**

The project area is located within the Blackbelt Prairie region of the Gulf Coastal Plain physiographic province. The Blackbelt Prairie belt is underlain by chalk, which belongs to the Demopolis and Mooreville members of the Selma Formation. The topography is nearly level to rolling hills separated by wide alluvium filled bottom lands. According to the Lee County soil survey, the predominate soil types in the bottom lands are Leeper fine sandy loam, Mantachie fine sandy loam, and Marietta loam. The predominate soil types on the hill areas are Ora fine sandy loam and Providence silt loam. The soils range from poorly drained soils in the bottom lands to moderately well drained soils in the hill areas.

#### 4. Noise

The project area ranges from both residential and retail areas at each end of the proposed project to agricultural areas in the middle. Existing vehicular traffic as well as farming operations contribute to some noise levels.

#### 5. View Shed

The existing view shed consists of open agricultural land on the west side of the parkway with the commercial development of the Barnes Crossing retail area along the east side just outside of a natural vegetative buffer.

#### 6. Floodplain

All the considered build alternatives encroach on the 100 year flood plain according to the National Flood Insurance Program maps.

### **D. Socio-Economic Environment**

The area surrounding the project is a mixture of commercial, industrial, residential and agricultural land.

### **E. Cultural Resources**

A cultural resources survey of the proposed project area was performed by John O'Hear, RPA and submitted to the Mississippi Department of Archives and History. By letter dated July, 26, 2007, the MDAH stated their determination that the project constitutes a "condition of no adverse effect."

### **F. Parkway Visitor Use and Experience**

The Natchez Trace Parkway provides opportunities for recreational activities such as: camping, picnicking, hiking, walking, auto tours, swimming, boating, horseback riding, exhibits, bicycling, fishing, running and jogging.

The average daily traffic on the section of the Parkway to be crossed by the proposed project was 5200 vehicles per day in 2006.

## IV. ENVIRONMENTAL ANALYSIS

### A. Natural Resources

#### 1. Vegetation

##### a. No Action Alternative

The existing species abundance would remain relatively the same; however, continued farming activity would prevent native grasses and trees from replenishing in the project area, outside the park.

##### b. Build Alternatives 2 and 3

The existing species abundance would remain relatively the same; however some existing vegetation in the immediate right-of-way of the proposed project would be cleared for road construction. Re-grassing of right-of-way slopes along with landscaping efforts by the City of Tupelo could actually increase the amount of woody vegetation in the area. Any landscaping efforts within the park will utilize park-approved native plant materials. Care will be taken to ensure that any disturbed areas are re-vegetated in order to prevent the influx of invasive species.

##### c. Build Alternative 4

The alignment of Build Alternative 4 would affect a larger area which would result in a greater amount of vegetative clearing, outside the park.

##### d. Conclusions

Under any of the alternatives, minor site specific adverse impacts to vegetated areas could result. Under any of the Build Alternatives, areas adjacent to the new road which are disturbed by construction activities would be reseeded and/or replanted with native species such as loblolly pine, cherrybark oak, green ash, swamp chestnut oak, bald cypress, cottonwood, and the park's traditional grass seed mix. In addition, the Natchez Trace Parkway would designate that subsequent tree planting and landscaping enhance the vegetative cover for this area, in an attempt to screen out new development. No impairment to local vegetation should occur. None of the alternatives would cause impairment to park resources.

#### 2. Threatened and Endangered Species

##### a. Build Alternatives 2, 3, and 4

The Department of Wildlife Fisheries and Parks Mississippi Natural

Heritage Program was consulted for possible impacts associated with all the build alternatives. Their response was that if best management practices are implemented, the proposed project poses no threat to state or federally listed species or their habitats. The United States Department of the Interior Fish and Wildlife Service was also consulted for possible impacts. At their request, a survey was conducted within the planned right-of-way on May 12 and 13, 2008 for the threatened Price's Potato Bean (*Apios priceana*). A complete survey found no occurrence of the *A. priceana* within or adjacent to the proposed project. By letter dated May 28, 2008, the US Fish and Wildlife Service concurred with the assessment that no federally listed species or their habitats or any candidate species occurs on site. (See Appendix A for attached letter).

b. Conclusion

Since no special status species have been identified in the project area, neither the No Action Alternative nor any of the Build Alternatives should affect any threatened or endangered species. No impairment to threatened or endangered species should occur. None of the alternatives would cause impairment to park resources.

3. Wildlife

a. No Action Alternative 1 and Build Alternative 4

Under these two alternatives, a new roadway would not be constructed perpendicularly across park lands. Wildlife traveling parallel to the parkway motor road would not encounter any artificial impediments to their movements. However, the width of the park within the project area is 800 feet (400 feet on either side of the centerline). Immediately adjacent to park property is private property that is currently agricultural in nature. Private property values have risen precipitously due to the encroaching commercial development of Barnes Crossing. It is fair to assume that private landowners will be tempted to sell their property to commercial interests, and that land that is currently agricultural will not remain so for long. This will result in a relatively narrow strip of natural habitat adjacent to the parkway motor road remaining as a wildlife corridor.

b. Build Alternatives 2 and 3

Under these alternatives, there will be temporary disturbance associated with the construction of the new road crossing that will cause birds and terrestrial wildlife to flee the area. Some limited wildlife mortality (turtles, burrowing animals) cannot be ruled out. It is assumed that once construction activities have ceased, most displaced species will return. Both build alternatives involve bridges, one bridge crossing the parkway

(2), and the other bridging the parkway over the new road (3). Alternative 2 will allow for some movement of wildlife under the bridge, as the bridge must be made long enough to accommodate the Natchez Trace National Scenic Trail parallel to the parkway motor road. But wildlife as a whole is under stress in this area of the park due to the urban nature of greater Tupelo, a city of 38,000 and growing. There are already six direct interchanges with the parkway within Tupelo, and numerous non-interchange crossings as well. While another bisection of park lands will not benefit wildlife, the overall deleterious effect on wildlife should be minimal.

c. Conclusion

The impacts to wildlife resulting from this road construction project will be local in nature, with the direct and indirect affects occurring both in and outside the park. The long-term, adverse impacts are expected to be negligible to minor, because they are occurring within the context of an urban area experiencing significant commercial and residential growth. Wildlife is already impacted by existing parkway road crossings, and by new and existing development surrounding the park. However, no impairment to the park's wildlife would occur as a result of implementing either of the build alternatives. None of the alternatives would cause impairment to park resources.

4. Wetlands

a. No Action Alternative 1

The No Action alternative would have no impact on wetlands located within the project area.

b. Build Alternatives 2, 3, and 4

The alignments of all the build alternatives would have a direct impact on approximately 16.45 acres of wooded wetlands and 10 streams. In addition to the Corps wetlands which would be impacted, Alternative 2 would have a direct impact on approximately 4.44 acres of NPS wetlands and Alternative 3 would have a direct impact on approximately 9 acres of NPS wetlands. Through the permitting process of the US Army Corps of Engineers, mitigation would be required to replace any wetlands which would be destroyed. Also, the process of placing embankments along low lying areas often creates wetlands by inadvertently impounding water. Mitigation would be accomplished by restoring 9 acres of degraded wetlands elsewhere within the Park.

c. Conclusions

Since the potential exists for adverse impacts to wetlands within the affected park boundary, a Statement of Findings for Executive Order 11990: Wetland Protection has been performed. The Statement of Finding for Wetlands performed in accordance with Director's Order 77-1 is attached in Appendix B. Wetland mitigation is proposed within the Natchez Trace Parkway as part of the SOF. Any affect to the wetland areas located outside the park boundary would be offset by mitigation efforts, so the net result of the build alternatives would be an increase in local wetland areas. None of the alternatives would cause impairment to park resources.

**B. Physical Environment**

1. Air Quality

a. No Action Alternative 1

Air quality levels would remain essentially in the same condition as they are under present conditions. However, as congestion continues to increase on existing thoroughfares leading to and from the project area, the increased idling time could actually result in additional emissions from automobiles resulting in indirect long term adverse impacts.

b. Build Alternatives 2, 3, and 4

No long term air quality impacts are expected as a result of these proposed alternatives. Although a new road would lead to more development which could result in increased traffic and emissions, the direct link from West Tupelo to Northeast Tupelo will greatly reduce the travel distance, time and congestion associated with the traffic in this area. This should result in a positive long term effect on air quality, or at least not lead to further degradation.

c. Conclusions

During construction, minor short term impacts to air quality levels may occur under the build alternatives. If necessary, during the course of project construction, measures will be taken to minimize airborne dust pollutants. Construction activity should not cause any more temporary airborne pollutants than existing farming operations cause. None of the alternatives would cause impairment to park resources.

## 2. Water Quality

### a. No Action Alternative 1

No change from the existing conditions would be anticipated with the no action alternative, however, sedimentation and runoff containing chemicals such as fertilizers and pesticides would continue to result from farming practices in the area. This could result in long term indirect adverse impacts associated with this alternative.

### b. Build Alternatives 2, 3, and 4

Potential short term impacts to water quality due to erosion may exist during construction; however, best management practices will be utilized to minimize potential impacts. A sediment and erosion control plan, including the use of best management practices, would be prepared as a part of any build alternative. In addition, any resulting developments would be regulated by local codes to include storm water detention, which would also help to provide sedimentation control.

### c. Conclusions

Although none of the alternatives eliminates the potential for decreased water quality, the build alternatives would be regulated to minimize temporary impacts and actually improve long term affects on local water quality. None of the alternatives would cause impairment to park resources.

## 3. Soils

### a. No Action Alternative 1

No change from the existing conditions would be anticipated with the no action alternative. Some soils will continue to be lost into the streams through erosion associated with farming activities.

### b. Build Alternatives 2, 3, and 4

Under the build alternatives, local soils will be excavated and re-used for embankment sections. Best management practices and permanent erosion control measures such as grassing, landscaping, rip rap, ditch treatments etc., should minimize or eliminate erosion and loss of native soils.

### c. Conclusions

No native soils should be adversely affected as a result of any alternative.

None of the alternatives would cause impairment to park resources.

4. Noise

a. No Action Alternative 1

No change from the existing conditions would be anticipated with the no action alternative.

b. Build Alternatives 2 and 3

Under these build alternatives, existing noise levels would temporarily increase during construction. Some minor, long term, adverse impacts could be expected as a result of road noise from traffic on the proposed roadway. The majority of the areas impacted are remote with no existing residences or businesses to be affected by the increase in road noise.

c. Build Alternative 4

Under this build alternative, existing noise levels would also temporarily increase during construction, resulting in minor, short term, adverse impacts. This increase would affect more people due to the high concentration of residences along the proposed alignment. There would also be a higher probability of major, long term, adverse impacts from any increase in noise levels produced by the new roadway due to the number of residences.

d. Conclusions

Adverse long term noise impacts associated with this project would be minor. There would be temporary increases in noise levels in all the build alternatives as well as minor long term increases in road noise. However, there are very few noise recipients located near the immediate area of the proposed routes for alternatives 2 and 3. Since the primary users of the proposed roadway would be passenger vehicles and the roadway will not contain rumble strips along the shoulders, any permanent increase in noise levels should be negligible. After construction, noise levels would be expected to return to near normal levels on build alternatives 2 and 3. Noise levels would be expected to increase by a greater amount on alternative 4 due the number of residences along this route. None of the alternatives would cause impairment to park resources.

5. View Shed

a. No Action Alternative 1

No change from the existing conditions would be anticipated with the no action alternative, with the exception that development will continue to grow in and around the Barnes Crossing area to the east. The park's planted vegetative screen will continue to grow and fill in.

b. Build Alternatives 2

Under this build alternative, a proposed bridge over the Parkway and the associated embankment and roadway would have some minor, long term, adverse impacts on the existing view shed. However, by using "Natchez Trace Parkway Design Guidelines" (Smith 2005) and the "National Park Service National Parkways Handbook" (NPS 1964) in the design and construction of the structures, as well as strategically placing natural landscaping along the new construction area, the direct effects of the new construction as well as any indirect effects from future development could be screened.

c. Build Alternatives 3

Under this build alternative, the proposed Parkway overpass of the proposed new roadway would also have minor, long term, adverse impacts on the existing view shed. By elevating this section of the Parkway, both the existing commercial developments as well as any future commercial developments along the perimeter of the Park rights-of-way would become even more visible to park visitors. With this alternative it would be more difficult to screen the view shed with landscaping.

d. Build Alternative 4

Under this alternative, an existing crossing would be reconstructed to accommodate the proposed new roadway. As a result, no adverse impact would result from any new crossings. The only long term, adverse impact would be the visibility of a new roadway section across the open fields along side the existing park property. Once again by strategically placing natural landscaping along the new construction area, the direct effects of the new construction as well as any indirect effects from future development could be screened.

e. Conclusions

Although some impact to the view shed will be inevitable with the build alternatives, the effect can be minimized through proper planning,

landscaping, and zoning regulations. None of the alternatives would cause impairment to park resources.

6. Flood Plains

a. No Action Alternative 1

No change from the existing conditions would be anticipated with the no action alternative.

b. Build Alternatives 2, 3, and 4

All the proposed build alternatives encroach on the 100 year flood plain according to the National Flood Insurance Program maps. Any possible risks associated with the proposed project will be minimal as a result of implementing design procedures that strive for a near no-rise condition impact. Any impacts on natural and beneficial flood plain values will also be minimal since the area is presently primarily agricultural. The project will be designed to minimize negative impacts to existing flood elevations by providing adequate openings for existing channels and floodways.

c. Conclusions

Floodplain areas exist within Park property. Drainage structures on the section near the Parkway will be designed for 100 year storm events and adequate openings will be provided. No risk of adverse impact exists for this section of the proposed project, per a “Statement of Findings for Executive Order 11988-Floodplain Management”, that has been prepared in conjunction with this EA. (See Appendix C, Statement of Findings-Floodplains.) The local flood plain manager has been consulted to ensure that the proposed action is consistent with existing watershed and flood plain management programs. No floodways are anticipated to be affected by this project. (See attached letter). None of the alternatives would cause impairment to park resources.

7. Night Sky

a. No Action Alternative 1

Under this alternative the night sky would continue to be negatively impacted by light pollution emanating from the rapidly expanding commercial district of Barnes Crossing, which is currently located less than a mile from the park boundary. The segment of parkway located within the city limits of Tupelo is essentially an urban park with degraded night skies.

b. Alternatives 2, 3, and 4

Under the build alternatives, new or expanded roadways would cross park property, adding the additional glare of headlights as motorists briefly transit the park after dark. However, this additional light pollution will add only negligibly to the already impacted night skies in this section of the park. The commercial district of Barnes Crossing is located within a mile of the park and continues to grow, creating night skies typical for an urban park.

c. Conclusion

The negative impact of light pollution is local to the city and surrounding communities of Tupelo. The addition of another roadway to a rapidly urbanizing setting will add directly, though negligibly, to night sky degradation as viewed from the park. The impacts of this light pollution will be long-term and adverse. Implementing the preferred alternative will not measurably impair night sky resources beyond the level to which they have already been impacted.

**C. Socio-Economic Environment**

1. No Action Alternative 1

No change from the existing conditions would be anticipated with the no action alternative.

2. Build Alternatives 2, 3, and 4

No appreciable change from the existing conditions is anticipated. The area surrounding the project will continue to be a mixture of commercial, industrial, residential and agricultural land. Although some commercial and residential development will occur, these types of development are occurring in the area regardless of the alternative chosen in this case.

3. Conclusions

No impact to the socio-economic environment is anticipated under either alternative. None of the alternatives would cause impairment to park resources.

**D. Cultural Resources**

1. Archeological Resources

a. No Action Alternative 1

It is not anticipated that archeological resources would be disturbed or lost under the no action alternative.

b. Build Alternatives 2, 3, and 4

As stated previously in this report, a cultural resources survey of the proposed alignments was performed by John W. O'Hear, RPA and submitted to the Mississippi Department of Archives and History. By letter dated July 26, 2007, the MDAH stated their determination that the proposed project constitutes a "conditional no adverse effect."

c. Conclusions

None of the alternatives are anticipated to have an adverse effect on archeological resources. None of the alternatives would cause impairment to park resources.

2. Historic Resources

a. No Action Alternative 1

No historical resources would be disturbed or lost under the no action alternative.

b. Build Alternatives 2, 3, and 4

No known historical resources would be disturbed or lost under the build alternatives. The Mississippi Department of Archives and History concurred by letter dated September 25, 2007 that no known cultural resources listed in or eligible for listing in the National Register of Historic Places will be affected.

c. Conclusions

The proposed project is not anticipated to have an adverse effect on historic resources. No impairment to the Park's historic resources would occur. The park's eligibility for placement on the National Register of Historic Places will not be affected. None of the alternatives would cause impairment to park resources.

**E. Parkway Visitor Use and Experience**

1. No Action Alternative 1

No change from the existing conditions would be anticipated with the no action alternative.

2. Build Alternatives 2, 3, and 4

Existing hiking and biking trails, including the Natchez Trace National Scenic Trail, will be incorporated into the proposed project to ensure that current use of the parkway would remain unchanged. Temporary impacts could occur during construction as activities may require temporary displacement of sections of the existing trails. Build alternatives 3 and 4 would require temporarily re-routing parkway vehicle traffic.

3. Conclusions

Visits to the park will remain relatively unchanged under any of the alternatives. Any impacts to visitor use and experience within the Park would be so site specific and minor that they would be considered negligible. None of the alternatives would cause impairment to park resources.

## **F. Energy Requirements and Conservation**

1. No Action Alternative 1

The no action alternative would result in no change in existing energy requirements.

2. Build Alternatives 2, 3, and 4

The proposed build alternatives would have a positive impact on energy use and conservation. By providing a shorter and more direct route for traffic crossing town to get to the Barnes Crossing area and the Highway 45 Bypass, less fuel would be required. Also, by moving traffic away from the heavily congested areas currently being utilized, less idling time would result in addition to the reduction in driving time. These build alternatives would all result in major, long term, beneficial impacts as reflected in the Benefit / Cost Analysis performed by the City of Tupelo in conjunction with the Mississippi Department of Transportation.

3. Conclusions

None of the alternatives will have a significant negative impact on energy resources or conservation issues. Although fuel will be utilized during construction, it is a readily available resource and the proposed project will have no significant impact on its depletion. The positive effect on fuel consumption for the build alternatives far outweighs any negative impacts resulting from the construction period. None of the alternatives would cause impairment to park resources.

## **G. Depletion of Natural Resources**

Although some natural resources would be used in any of the build alternatives, none would be depleted. These resources are readily available and the project will have no significant impact on their existence.

#### Conclusion

None of the alternatives would cause impairment to natural resource commodity availability or park resources.

### **H. Cumulative Impacts**

Cumulative impacts are those impacts on the environment that result from the incremental effect of the project when considered with interrelated past, present, and reasonably foreseeable future projects. This proposed project is part of Phase IV of the Tupelo Major Thoroughfare program. The purpose of the program is to improve traffic conditions in the Tupelo area by providing improved traffic capacity, safety and efficiency. This project is an integral link in a nearly completed inner traffic corridor around the City of Tupelo. Millions of dollars have already been spent over the last 15 years completing other portions of this loop. With recent regional developments such as the location of the Toyota Plant in Blue Springs, just west of town, the completion of this loop becomes all the more critical. Traffic congestion will only continue to worsen on the already crowded existing thoroughfares. In addition to the projects mentioned, the Mississippi Department of Transportation is currently working on plans for the extension of Highway 6 from Pontotoc County to the south side of the City of Tupelo. As well as bringing even more traffic to the already congested city thoroughfares, the proposed project will also intersect the park property southwest of Tupelo.

#### 1. No Action Alternative 1

The no action alternative would not do anything to improve or even maintain the safety and capacity of the existing local thoroughfares, including the Natchez Trace Parkway. As traffic continues to increase in the area, even more local and regional travelers will attempt to use the Parkway as a short-cut across town resulting in more crowded and dangerous driving conditions on the Parkway. Except for increased traffic in the local area, the Park as a whole would remain relatively unchanged under the no action alternative.

#### 2. Build Alternatives 2, 3, and 4

Under these alternatives, the Major Thoroughfare plan, which was started nearly twenty years ago, can reach its full potential. By completing this integral part of the thoroughfare loop, it will provide the safest and most efficient access for vehicular traffic across the City of Tupelo. Not only will this instantly save energy, time and money, it will also protect our most valuable resource, human life. Although some development will most likely occur as a direct or indirect

result of this new access route, federal, state, and local development requirements will help to ensure environmental protection.

### 3. Conclusions

While none of the alternatives would appear to have a significant negative cumulative impact on the Parkway, the major, long term, negative impact of the no action alternative on other local thoroughfares should be considered. The long term, positive cumulative impacts associated with build alternatives 2, 3, and 4 make them most desirable. None of the alternatives would cause impairment to park resources.

#### **I. Irreversible or Irretrievable Commitment of Resources**

There are no irreversible or irretrievable resources contributed to this project. The only irreversible or irretrievable resource associated with any alternative is the millions of dollars spent on previous sections of the loop road which would not be able to reach its full potential as a result of selecting the no action alternative.

#### Conclusion

None of the alternatives would make an irreversible or irretrievable commitment of resources or cause an impairment to park resources.

V. **CONSULTATION / COORDINATION AND PERMITTING**

In addition to the portion of the proposed project which will interact with the Natchez Trace Parkway, the work will consist of several sub-projects. Any governing agencies having an interest in any sub-project will be contacted for permitting and approval in conjunction with that project. The list of agencies who would be contacted for permitting purposes includes but is not limited to the following:

- MDEQ
- Army Corps of Engineers
- FEMA / MEMA
- Town Creek Water Management District
- MDOT
- FWS
- MDWFP
- MSSHPO

The following is a list of contacts who have already been asked to provide comments or information concerning the proposed project. Such contact will continue to insure that environmental impacts are adequately defined and addressed.

Mississippi Natural Heritage Program  
2148 Riverside Drive  
Jackson, MS 39202

Natural Resources Conservation  
Service

State Clearinghouse for Federal  
Programs  
1301 Woolfolk Building Suite E  
Jackson, MS 39201

Tupelo Service Center  
3098 Cliff Gookin Blvd.  
Tupelo, 38801-7005

Mississippi Department of Archives  
and History  
Historic Preservation Division  
P.O. Box 571 Jackson, MS 39205  
(Letter of reply attached)

U.S. Fish and Wildlife Service  
6578 Dogwood View Pkwy.  
Suite A  
Jackson, MS 39213  
(Letter of reply attached)

## **VI. ENVIRONMENTALLY PREFERRED ALTERNATIVE**

The Environmentally Preferred Alternative is determined by applying the criteria suggested in the National Environmental Policy Act of 1969 (NEPA), which is guided by Council of Environmental Quality (CEQ) regulations. CEQ regulations provide direction that “the environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA’s Section 101 which considers:

1. Fulfilling the responsibilities of each generation as trustee of the environment for succeeding generations;
2. Assuring for all generations safe, healthful, productive, and esthetically and culturally pleasing surroundings;
3. Attaining the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
4. Preserving important historic, cultural, and natural aspects of our national heritage and maintaining, wherever possible, an environment that supports diversity and variety of individual choice;
5. Achieving a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and
6. Enhancing the quality of renewable resources and approaching the maximum attainable recycling of depletable resources (NEPA, section 101)

Generally, this means the alternative that causes the least damage to the biological and physical environment. It also means the alternative that best protects, preserves, and enhances historic, cultural and natural resources.”

Build Alternative 2 is the most Environmentally Preferred Alternative. Although the No Action Alternative would appear to have the least immediate affect on the Parkway, there are several positive effects of Build Alternative 2 which make it preferred. Mitigation associated with the project would actually increase the amount of wetlands, shorter travel distances associated with the proposed project should have a positive long term effect on air quality and energy use and conservation, reduction in farming activities along with regulations regarding storm water control should help to improve water quality, and the cumulative impact of the Build Alternative 2 in conjunction with the rest of the Major Thoroughfare program including safer roadways with less likelihood of serious and/or fatal accidents far outweighs the minor adverse effects presented in this report.

Of all the build alternatives, 2 would have the least adverse impact on the visitor use and view shed of the Parkway.

## **VII. ENVIRONMENTAL COMMITMENTS**

Since the No Action Alternative does not meet the purpose and need for the action, one of the Build Alternatives has been selected. Build Alternative 2 is considered to be both the most environmentally preferred and most desirable from a practical use standpoint. In order to minimize the environmental impacts associated with the preferred alternative, the following measures are recommended for implementation:

1. An erosion and sediment control plan would be prepared and included in construction plans.
2. If archeological artifacts are encountered, construction would be halted and the Superintendent of the Natchez Trace Parkway would be notified immediately.
3. Any wetland areas identified as Waters of the United States within the proposed project limits will be delineated and permitted through the U.S. Army Corps of Engineers (Section 404, Clean Water Act). Wetlands delineated within the boundary of the Natchez Trace Parkway will be classified according to the U.S. Fish and Wildlife Service's Cowardin criteria, and analyzed per compliance with NPS Director's Order/Reference Manual 77-1.
4. Landscaping measures, along with planning and development code requirements, would be stipulated by the Natchez Trace Parkway to protect the view shed of the Parkway.

## **Appendix A - Documentation of Agency Consultation**

- Natchez Trace Parkway letter to Ernest Joyner, Tupelo Major Thoroughfare Committee member referencing meeting about proposed project and discussing Environmental Assessment requirements.
- City of Tupelo letter to Natchez Trace Parkway concerning Memorandum of Understanding and designating Engineering Solutions, Inc. as project engineer.
- ESI letter to the Department of Administration and Finance, Clearing House Officer requesting a review of the project area and forwarding to any and all appropriate agencies with involvement or interest in the project.
- ESI letter to the Mississippi Department of Archives and History requesting a review of the project area and determination of possible impacts to any cultural resources.
- Mississippi Department of Archives and History letter of response requesting a cultural resources survey in the project area.
- Mississippi Department of Archives and History letter of concurrence with the recommendations of the cultural resources survey report by John W. O'Hear and stating that the project constitutes a "conditional no adverse effect."
- Mississippi Department of Archives and History letter of concurrence with the cultural resources evaluation report by Dr. Jay K. Johnson that states that no known cultural resources will be affected and that the project may proceed without further testing.
- ESI letter to the Department of Wildlife Fisheries and Parks, Natural Heritage Program, requesting a review of the project area and recommendations to prevent any adverse affect on threatened or endangered species.
- Herring Environmental letter to Mississippi Natural Heritage Program accompanying Threatened and Endangered Species Survey for the project.
- Mississippi Natural Heritage Program letter of response stating that if best management practices are implemented, the proposed project likely poses no threat to listed species or their habitats.
- Herring Environmental letter to US Fish and Wildlife Service accompanying Threatened and Endangered Species Survey for the project.
- U.S. Fish and Wildlife Service letter of response concurring with the assessment that no federally listed species or their habitats or any candidate species occurs on site.

**Ernie Joyner**

---

**From:** <Debra\_Diaz@nps.gov>  
**To:** <ernie.joyner@bxs.com>  
**Sent:** Thursday, August 10, 2006 2:55 PM  
**Subject:** Barnes Crossing/Coley Road Extension Project

OFFICIAL CORRESPONDENCE VIA ELECTRONIC MAIL  
HARD COPY TO FOLLOW

United States Department of Interior  
NATIONAL PARK SERVICE  
Natchez Trace Parkway  
2680 Natchez Trace Parkway  
Tupelo, Mississippi 38804

In reply refer to:  
L30-3D(NATR)

Mr. Ernest L. Joyner III  
P.O. Drawer 789  
Tupelo, Mississippi 38802

Dear Mr. Joyner:

This is in reference to our meeting with you and Mr. Pirkle on August 8, 2006, concerning the proposed Barnes Crossing/Coley Road Extension project that is planned to cross the Natchez Trace Parkway near milepost 265.8. We have summarized the highlights of our meeting and, as promised, we will give you our interpretation of the National Environmental Policy Act (NEPA), National Historic Preservation Act, and the right-of-way application processes as it relates to the Parkway.

The City of Tupelo has recently received authorization from its citizens to begin the next phase of the major thoroughfare program. This phase includes the extension of Coley Road to intersect with the Barnes Crossing Road along Highway 145 in North Tupelo. This requires obtaining a right-of-way from the Natchez Trace Parkway for the use of United States government lands. Right-of-ways are very difficult to obtain and could require up to two years to secure, due to the fact that issuance is not at the park level but requires approval from the Southeast Regional Director. The city will be required to demonstrate through NEPA compliance documents that there is no feasible alternative to the currently proposed project which requires the use of park lands.

A minimum of an Environmental Assessment (EA) is required to be completed and attached to the right-of-way application for approval by our Regional Director. The City of Tupelo will be required to prepare an EA for the Natchez Trace Parkway Superintendent's distribution.

One of the elements of the EA consists of analyzing the impact the

8/10/2006

proposed development will have on the viewshed of the Natchez Trace Parkway. The 444-mile Natchez Trace Parkway was conceived and developed in the 1930's as a designed landscape, which integrates a traditional rural southern landscape experience for Parkway visitors. This resource is dependent upon both landscape management practices on Parkway lands and their interaction with adjacent land uses over which the National Park Service has little or no direct control. The quality and integrity of these landscape resources are integral to the aesthetic and recreational experiences of the Parkway visitors. The protection of the scenic integrity of the Parkway's scenic viewshed is one of the management objectives established by the public for preserving the Parkway to benefit future generations. The designation of the Parkway as a National Scenic By-way and an All American Road lends even more credence to the importance and significance of maintaining its scenic viewshed, unencumbered by the visual clutter of our modern day world.

Other issues we discussed in our meeting which will be further analyzed in the EA are as follows:

- a. Flooding. The Parkway is concerned that increased development in the flood plain will severely impact the future flood levels of Old Town Creek, which could have the potential to flood the Parkway motor road if flood frequency levels are raised.
- b. Signs. The Parkway is concerned about additional signs impacting its viewshed. It was discussed that the City of Tupelo could institute stricter signing regulations to help mitigate this potential.
- c. Buffer areas. The Parkway would like to have a vegetative buffer to help screen development from view of the Parkway.
- d. Bridge design. A picture of the Mississippi Highway 14 bridge crossing the Parkway was presented as a preferred design. It was discussed that traditional Parkway bridges are more costly than typical city and state highway bridges.
- e. Construction process. The Parkway may want our Federal Highway Administration (FHWA) design consultants to perform the construction design and contracting in lieu of the City. FHWA was contacted and they indicated they would be interested in pursuing this if the Parkway so requested.
- f. Detours. A detour will be required if the Parkway is constructed over the new road crossing, instead of the new road crossing over the Parkway. The EA will analyze the impacts of both.
- g. Construction estimate. Funding has been requested by the City through the Mississippi congressional delegation in the amount of three million dollars, and the concern was that without a construction cost estimate, the amount requested may not be enough to complete the proposed construction. A construction estimate cannot be completed until the EA is finalized to determine which alternative is selected.
- h. National Scenic Trail. The trail runs through this area and will need to be accommodated for in the design.
- i. Wetlands mitigation. If wetlands are identified and impacted by construction, a Statement of Findings will also be required to be

8/10/2006

prepared before a right-of-way can be issued and a Finding of No Significant Impact (FONSI) can be signed.

j. Access to the Parkway. Access to the Natchez Trace Parkway from the new road crossing is not an option because the Parkway is a limited access motor road.

k. Memorandum of Understanding. The Parkway will prepare a Memorandum of Understanding between the City of Tupelo and the United States government, which will detail requirements of this Partnership.

l. Archeological clearance and Section 106 of the National Historic Preservation Act compliance process will be required regardless of which alternative is proposed on park lands. Please be aware that the entire area under consideration for the proposed construction activities is archeologically sensitive and could require extensive mitigation. The potential for invoking the Native American Graves Protection Act (NAGPRA) is also possible in this particular area. The City will be required to bear all costs associated with this clearance process.

The NEPA process requires public participation in preparation of the various alternatives. The National Park Service uses a public workshop format to fulfill this requirement. Once the various alternatives are identified, a draft EA will be produced. Another public meeting will be required so that the public can comment on the draft alternatives. A final EA will then be prepared, and if substantial changes were not made in the draft document, a FONSI will be prepared and signed by the Southeast Regional Director.

Once the FONSI is signed, we will prepare the draft right-of-way application which the City will review. After mutual agreement on the content of the application, we will then submit the entire package to our Regional Director for approval or disapproval. If approved, a right-of-way will be issued to the City of Tupelo for construction and maintenance of the proposed crossing.

As you know, the processes we have discussed are set aside to help protect the units of the National Park System, of which the Natchez Trace Parkway is but one of many. Your expressed desire to expand your fair city in harmony with the Natchez Trace Parkway is commendable and we look forward to working equitably with you on this project, as well as others to follow.

Should you require additional information on this subject, please feel free to contact me, or Chief of Resource Management D. Craig Stubblefield, with any questions you might have at (662) 680-4004.

Sincerely,

/s/

Stennis R. Young  
Acting Superintendent

8/10/2006

cc: Mayor Ed Neeley, City of Tupelo, Mississippi  
Greg Pirkle, Phelps Dunbar, LLP

8/10/2006

CITY OF TUPELO  
ED NEELY, MAYOR

March 27, 2007



SUPERINTENDENT	13
ASST. SUPERINTENDENT	11
ADMINISTRATION	11
MAINTENANCE	
PLANNING ACTIVITIES	
CONSTRUCTION	
ENVIRONMENTAL ANALYSIS	
DEC	
ACTORBY	12/1

Ms. Pat Hooks  
Regional Director  
Natchez Trace Parkway  
100 Alabama Street Southwest  
1924 Building  
Atlanta, GA 30309

RE: Approving Participation in Major Thoroughfare Program Phase IV

Dear Ms. Hooks:

By letter dated August 10, 2006, Acting Superintendent of the Natchez Trace Parkway Stennis R. Young, set forth various criteria for allowing the construction of a bridge near mile post 265.8 of the Natchez Trace Parkway. One of the criteria was the execution of a Memorandum of Understanding between the Parkway and the City of Tupelo.

As you know, the citizens of the City of Tupelo have approved the project and it is now underway. The engineers for the program have been in contact with your Tupelo office regarding a proposed bridge. Please accept this as the formal request for consent of the Natchez Trace Parkway for the construction of a bridge at that section of the Parkway. It is our understanding that you will present a Memorandum of Understanding for our review. If that is not correct, please let me know.

Please note that the engineer for the construction of this portion of the program is Engineering Solutions, Inc. If you have any questions regarding the construction or direction of this project please contact John White at the following address and/or phone number:

Engineering Solutions, Inc.  
264 South Veterans Blvd.  
Tupelo, MS 38804  
(662) 840-9063

We look forward to your response in this matter.

Sincerely yours,

Ed Neely  
Mayor

cc: Superintendent Stennis R. Young ✓  
Mr. Darrell Smith  
Ms. Daphne Holcombe  
Mr. John White  
Mr. Phillip Harbor  
Gregory D. Pinks, Esq.

71 EAST TROY STREET • POST OFFICE BOX 1485  
TUPELO, MISSISSIPPI 38802-1485  
TELEPHONE 662.841.6513 • FAX 662.840.2875



United States Department of the Interior

NATIONAL PARK SERVICE

Natchez Trace Parkway  
2580 Natchez Trace Parkway  
Tupelo, Mississippi 38804



INDIRECT REFERENCE

13027 (NATR) xL30-3D  
xA44 (05570-07-007)

November 27, 2007

The Honorable Ed Neelly  
Mayor of Tupelo  
P.O. Box 1485  
Tupelo, Mississippi 38802

Dear Mayor Neelly:

This is in reference to the proposed crossing of the Natchez Trace Parkway with the Barnes Crossing/Coley Road Extension.

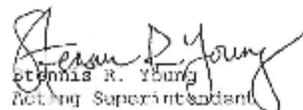
On April 9, 2007, we sent your office a draft General Agreement (GA) between the City of Tupelo and the National Park Service (NPS) for the proposed crossing of the Parkway with the Barnes Crossing/Coley Road Extension for your review and comment (copy enclosed). A signed GA is required before the City can commence preparation of an Environmental Assessment (EA) for the crossing. Please return your comments to this office as soon as possible. After your review, and that of our Regional Solicitor, we will prepare a final General Agreement for your signature.

A recent article (November 21, 2007) in the Northeast Mississippi Daily Journal indicates that the alignment of the Coley Road Extension has been established up to the boundary of the Parkway. Please be advised that the alignment of the new road as it interfaces with the Natchez Trace Parkway cannot be determined until after the EA is prepared. This interface determines not only "how" the road crosses the Parkway but also "where" the road crosses the Parkway. Construction of this road up to the Parkway boundary, before the EA is complete and a Finding of No Significant Impact signed by the NPS Southeast Regional Director, could possibly require the alignment to be altered depending on the selected alternative.

If we can be of further service to you or the City of Tupelo or if you require additional information, please feel free to contact D. Craig Stubblefield, Chief of Resource Management, at (662) 680-4055.

Thank you for your continued support of the Natchez Trace Parkway.

Sincerely,

  
Dennis R. Young  
Acting Superintendent

Enclosure

cc: Greg Pirkle, Major Thoroughfare Committee Chairman, w/enc1



January 4, 2007

Janet Riddell, Clearinghouse Officer  
Department of Administration and Finance  
1301 E Woolfolk Bldg.  
501 North West St.  
Jackson, MS 39201

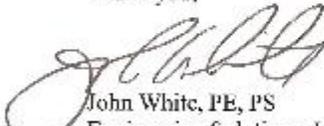
**Coley Road / Barnes Crossing Road Extended (McCullough Blvd. to N. Gloster St.)  
Tupelo Major Thoroughfare Program, Tupelo, MS**

Enclosed you will find excerpted copies of the Sherman Quadrangle Map and the Tupelo Quadrangle Map detailing the location of the referenced roadway project proposed for the City of Tupelo, MS as part of their Major Thoroughfare program.

Please review and forward to any and all appropriate agencies with involvement or interest in the project.

If any additional information is needed, please call.

Thank you,



John White, PE, PS  
Engineering Solutions, Inc.

cc: Phillip Harbor  
John Crawley

November 28, 2006

Mr. Roger G. Walker  
Mississippi Department of Archives and History  
Historic Preservation Division  
P.O. Box 571  
Jackson MS 39205-0571

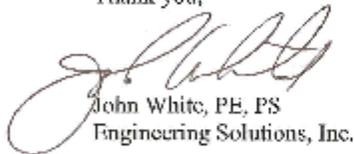
**Coley Road / Barnes Crossing Road Extended (McCullough Blvd. to N. Gloster St.)  
Tupelo Major Thoroughfare Program, Tupelo, MS**

Enclosed you will find excerpted copies of the Sherman Quadrangle Map and the Tupelo Quadrangle Map detailing the location of the referenced roadway project proposed for the City of Tupelo, MS as part of their Major Thoroughfare program.

We are requesting a letter from the Mississippi Department of Archives and History regarding the impact of the location of the proposed project to any cultural resource listed in, or eligible for listing in, the National Register of Historic Places. If the initial determination is that a significant and adverse impact will occur, please advise this office of the appropriate necessary documentation.

If any additional information is needed, please call.

Thank you,



John White, PE, PS  
Engineering Solutions, Inc.

cc: Phillip Harbor  
John Crawley



January 8, 2007

Mr. John White, P.F.  
Engineering Solutions, Inc.  
264 South Veterans Blvd.  
Tupelo, Mississippi 38804

RE: Proposed Coley Road/ Barnes Crossing Road Extended (McCullough Blvd. To N. Gloster Street), Tupelo Major Thoroughfare Program, MDAH Project Log #12-042-06, Lee County

Dear Mr. White:

Our staff has reviewed your November 28, 2006, request for a cultural resource assessment for the above referenced project, which we received on December 8, 2006. Based on the presence of a significant number of known archaeological sites in the path of the proposed road, many of them associated with the Chickasaw, it is our determination that a cultural resources survey be conducted in the project area. Upon receipt of the cultural resources survey, we will be able to offer appropriate comments.

A list of individuals who have represented themselves as being willing and qualified to do archaeological survey work in Mississippi will be furnished upon request. A copy of this letter should be made available to the contracting archaeologist. If you have any questions, please contact Pamela Edwards Lieb, Chief Archaeologist, at 601-576-6940.

Sincerely,

A handwritten signature in blue ink that reads "Jim Woodrick".

Jim Woodrick  
Review and Compliance Officer

FOR: H.T. Holmes  
State Historic Preservation Officer

c: Clearinghouse for Federal Programs



July 26, 2007

Mr. John White  
Engineering Solutions, Inc.  
264 South Veterans Blvd.  
Tupelo, Mississippi 38804

RE: Cultural Resources Survey of the proposed Coloy Road Extension, City of  
Tupelo, MDAH Project Log #07-043-07, Lee County

Dear Mr. White:

We have reviewed the July 6, 2007, cultural resources survey report by John W. O'Hear, Archaeologist, received by our office on July 10, 2007, for the above referenced undertaking, pursuant to our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800. After review, we concur that both Site 22Le1022 and Site 22Le704 are eligible for listing in the National Register of Historic Places, and concur with the recommendations in the report for the treatment of both sites (please see "Summary and Conclusions," p. 17). For Site 22Le704, we concur that the site should be avoided entirely. In addition to the recommended treatment for these sites, we also recommend that the Natchez Trace Parkway be provided a copy of this report in order to provide the Natchez Trace Parkway an opportunity to comment on the effect of the project. With these recommendations, it is our determination that the project constitutes a "conditional no adverse effect."

Please provide a copy of this letter to Mr. O'Hear. If you need further information, please call Pamela Lieb, Chief Archaeologist, at (601) 576-6940.

Sincerely,

  
Jim Woodrick  
Review and Compliance Officer

FOR: H.T. Holmes  
State Historic Preservation Officer

c: Clearinghouse for Federal Programs



September 25, 2007

Mr. John White  
Engineering Solutions, Inc.  
264 South Veterans Blvd.  
Tupelo, Mississippi 38804

RE: An Evaluation of Site 22Le1022 along the Route of the Cocley Road Extension,  
MDAH Project Log #08-170-07, Lee County

Dear Mr. White:

We have reviewed the cultural resources evaluation report by Dr. Jay K. Johnson, Archaeologist, received on August 27, 2007, for the above referenced undertaking, pursuant to our responsibilities under Section 106 of the National Historic Preservation Act and 36 CFR Part 800. After review, we concur that no known cultural resources listed in or eligible for listing in the National Register of Historic Places will be affected. Therefore, we concur that the project may proceed without further testing.

There remains the possibility that unrecorded cultural resources may be encountered during the project. Should this occur, we would appreciate your contacting this office immediately in order that we may offer appropriate comments under 36 CFR 800.13.

Please provide a copy of this letter to Dr. Johnson. If you need further information, please let us know.

Sincerely,

  
Jim Woodrick  
Review and Compliance Officer

FOR: H.T. Holmes  
State Historic Preservation Officer

cc: Clearinghouse for Federal Programs

December 3, 2007

Mississippi Natural Heritage Program  
Mississippi Museum of Natural Science  
Department of Wildlife Fisheries and Parks  
2148 Riverside Drive  
Jackson, MS 39202

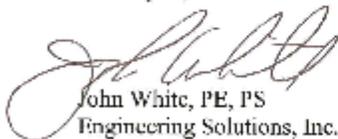
**Coley Road / Barnes Crossing Road Extended (McCullough Blvd. to N. Gloster St.)  
Tupelo Major Thoroughfare Program, Tupelo, MS**

Enclosed you will find excerpted copies of the Sherman Quadrangle Map and the Tupelo Quadrangle Map detailing the location of the referenced roadway project proposed for the City of Tupelo, MS as part of their Major Thoroughfare program.

We are requesting a letter regarding the impact of the referenced project at the proposed location on any state listed endangered or threatened species, or documentation that the proposed operation is in compliance with the statutes, rules, and regulations within the jurisdiction of the Mississippi Wildlife Fisheries and Parks concerning listed endangered or threatened species.

If any additional information is needed, please call.

Thank you,



John White, PE, PS  
Engineering Solutions, Inc.

December 13, 2007



**Engineering Solutions Inc.**  
264 South Veterans Blvd.  
Tupelo, MS 38804

Re: Coley Road/ Barnes Crossing Road Extended  
Lee County

**R# 6379**

To John White, PE, PS:

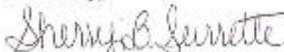
In response to your request for information dated December 3, 2007, we have searched our database for occurrences of state or federally listed species and species of special concern that occur within 2 miles of the site of the proposed project. Please find our comments and recommendations below.

Based on information provided, we conclude that if best management practices are implemented, particularly measures to prevent or, at least, minimize negative impacts to water quality, the proposed project likely poses no threat to listed species or their habitats. We recommend that best management practices are implemented and monitored for compliance, specifically measures that will prevent ANY suspended silt and contaminants from leaving the site in stormwater run-off as this may negatively affect water quality and habitat conditions within nearby streams and waterbodies.

In addition, portions of this project site are underlain by hydric soils and may be designated wetlands. If this roadway project is approved, we ask that serious consideration be given to the cumulative impacts of wetland disturbance and elimination.

Please feel free to contact us if we can provide any additional information, resources, or assistance that will help minimize negative impacts to the species and/or ecological communities identified in this review. We are happy to work with you to ensure that our state's precious natural heritage is conserved and preserved for future Mississippians.

Sincerely,

  
Sherry B. Surrutte, Coordinator  
Mississippi Natural Heritage Program  
(601) 354-7303, ext. 118

*Preserving Natural Mississippi*  
®

2140 RIVERSIDE DRIVE • JACKSON, MS 39207-1355 • PHONE 601 354-7305 FAX 601 354-7277 • [www.mdnaturalheritage.org](http://www.mdnaturalheritage.org)  
CORPORATE OFFICE: 2140 RIVERSIDE DRIVE, JACKSON, MS 39207



**HERRING** ENVIRONMENTAL, LLC

144 Herring Hill Drive  
Telephone: 662-869-2935  
Fax: 662-869-1669

Saltillo, MS 38866  
Mobile: 662-878-0215  
E-Mail: rherring@bellsouth.net

23 May 2008

Mr. Andy Sanderson  
Mississippi Natural Heritage Program  
2148 Riverside Drive  
Jackson, MS 39202-1353

**RE: Threatened and Endangered Species Survey of Proposed Barnes  
Crossing Loop Road  
Tupelo, Lee County, MS**

Dear Mr. Sanderson:

Please review the enclosed Threatened and Endangered Species Survey of the 4.2 mile proposed Barnes Crossing Loop Road in the City of Tupelo, Lee County, MS. If you concur with my findings please provide some form of acknowledgement.

Find enclosed a \$30.00 check for payment in advance for your data base review of know occurrences of record. I look forward to your reply. Do not hesitate to give me a call or e-mail if you have any questions at all.

Sincerely,

Richard Herring, PWS, CWB

Cc:  
Daniel Gregg, US Fish and Wildlife Service, Jackson, MS  
John White, Engineering Solutions Inc., Tupelo, MS



**MISSISSIPPI  
DEPARTMENT OF WILDLIFE, FISHERIES, AND PARKS**

Sam Polles, Ph.D.  
Executive Director

May 28, 2008

Richard Herring  
Herring Environmental, LLC  
133 Herring Hill Dr.  
Saltillo, MS 38866

Re: Threatened and Endangered Species Survey of Proposed Barnes  
Crossing Loop Road **R# 6661**  
Tupelo, Lee County, Mississippi

To Richard Herring:

In response to your request for information dated May 23, 2008, we have searched our database for occurrences of state or federally listed species and species of special concern that occur within 2 miles of the site of the proposed project. Please find our concerns and recommendations below.

Based on information provided, we conclude that if best management practices are implemented, particularly measures to prevent, or at least, minimize negative impacts to water quality, the proposed project likely poses no threat to listed species or their habitats.

We conclude that if best management practices are implemented, particularly measures to prevent or, at least, minimize negative impacts to water quality, the proposed project likely poses no threat to listed species or their habitats. We recommend measures be taken to minimize the destruction of wetlands, and if avoidable, adequate mitigation is performed.

Please feel free to contact us if we can provide any additional information, resources, or assistance that will help minimize negative impacts to this area. We are happy to work with you to ensure that our state's precious natural heritage is conserved and preserved for future Mississippians.

Sincerely,



Sherry B. Surrette, Coordinator

Mississippi Natural Heritage Program

(601) 354-6367, ext. 118

The Mississippi Natural Heritage Program (MNHP) has compiled a database that is the most complete source of information about Mississippi's rare, threatened, and endangered plants, animals, and ecological communities. The quantity and quality of data collected by MNHP are dependent on the research and observations of many individuals and organizations. In many cases, this information is not the result of comprehensive or site-specific field surveys; most natural areas in Mississippi have not been thoroughly surveyed and new occurrences of plant and animal species are often discovered. Heritage reports summarize the existing information known to the MNHP at the time of the request and cannot always be considered a definitive statement on the presence, absence or condition of biological elements on a particular site.



***HERRING*** ENVIRONMENTAL, LLC

144 Herring Hill Drive  
Telephone: 662-869-2935  
Fax: 662-869-1669

Satillo, MS 38866  
Mobile: 662-678-0215  
E-Mail: rherring@bollsouth.net

23 May 2008

Mr. Daniel Gregg  
US Fish and Wildlife Service  
6578 Dogwood View Parkway  
Suite A  
Jackson, MS 39213

**RE: Threatened and Endangered Species Survey of Proposed Barnes  
Crossing Loop Road  
Tupelo, Lee County, MS**

Dear Daniel:

Please review the enclosed Threatened and Endangered Species Survey of the 4.2 mile proposed Barnes Crossing Loop Road in the City of Tupelo, Lee County, MS. If you concur with my findings please provide some form of acknowledgement.

I look forward to your reply. Do not hesitate to give me a call or e-mail if you have any questions at all.

Sincerely,

Richard Herring, PWS, CWB

Cc:  
Andy Sanderson, MS Natural Heritage Program, Jackson, MS  
John White, Engineering Solutions Inc., Tupelo, MS



## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
Mississippi Field Office  
6578 Dogwood View Parkway, Suite A  
Jackson, Mississippi 39213

May 28, 2008

Mr. Richard Herring  
Herring Environmental, LLC  
144 Herring Hill Drive  
Saltillo, Mississippi 38866

Dear Mr. Herring:

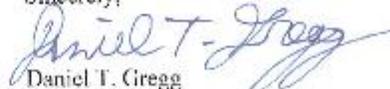
The U.S. Fish and Wildlife Service (Service) received your letter dated May 23, 2008, regarding the results of a survey for the presence of federally listed threatened or endangered species, which may occur on the 4.2 mile Barnes Crossing Loop Road in the City of Tupelo, Lee County, Mississippi. The following comments are provided in accordance with the Endangered Species Act (ESA) (87 Stat. 884, as amended 16 U.S.C. 1531 et seq.).

According to your report, a survey was conducted within the planned right-of-way on May 12 and 13 for the threatened Price's Potato Bean (*Apios priceana*). A complete survey found no occurrence of the *A. priceana* within or adjacent to the proposed ROW of the Barnes Crossing Loop Road.

Based on the survey, the Service concurs with the assessment that no federally listed species or their habitats or any candidate species occurs on site. No further consultation under Section 7 of the ESA will be necessary unless the size and scope of the project were to change, or new evidence is presented documenting the presence of federally listed species within or adjacent to the project area.

If you have any additional questions, please feel free to contact this office, telephone: (601) 321-1136.

Sincerely,

  
Daniel T. Gregg  
Fish and Wildlife Biologist

CITY OF TUPELO  
ED NEELLY, MAYOR

DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT

July 25, 2008

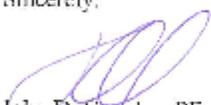
Mr. John White, PE, PS  
264 South Veterans Blvd.  
Tupelo, MS 38804

Re: Stormwater Conveyance Design for Bridges and Crossdrains  
Northern Loop Project, Tupelo, MS

Mr. White:

I have reviewed your submitted design data for the above captioned project. All drainage structures appear to be designed to discharge the 100 year flows or greater in accordance with the city's floodplain management ordinance. There are presently no floodways encountered over the course of this project so a no-rise certification on the embankment of the roadway will not be required. Should you have any questions or comments, please feel free to call me at 871-8231.

Sincerely:



John D. Crawley, PE, CFM  
City Engineer, Floodplain Manager

71 EAST TROY STREET • POST OFFICE BOX 1485  
TUPELO, MISSISSIPPI 38802-1485  
TELEPHONE 662.841.6414 • FAX 662.841.6550

## **Appendix B- Statement of Findings-Wetlands**

**STATEMENT OF FINDINGS FOR EXECUTIVE ORDER 11990  
WETLANDS PROTECTION**

**FOR**

**COLEY EXTENDED / BARNES X-ING EXTENDED  
ROADWAY PROJECT**

**@**

**NATCHEZ TRACE PARKWAY  
TUPELO, MS**

\_\_\_\_\_  
Recommended  
Superintendent, Natchez Trace Parkway

\_\_\_\_\_  
Date

\_\_\_\_\_  
Certified for Technical Adequacy and Servicewide Consistency  
Chief, WASO Water Resource Division

\_\_\_\_\_  
Date

\_\_\_\_\_  
Approved  
Director, Southeast Region, NPS

\_\_\_\_\_  
Date

## **INTRODUCTION**

Executive Order 11990 (Protection of Wetlands) requires the NPS and other federal agencies to evaluate the likely impacts of actions in wetlands. The objective of E.O. 11990 is to avoid to the extent possible the long and short term adverse impacts associated with the destruction or modification of wetland and to avoid direct or indirect support of new construction in wetlands wherever there is a practicable alternative. NPS Director's Order #77-1 Wetland Protection and Procedural Manual #77-1 provide NPS policies and procedures for complying with E.O. 11990. This Statement of Findings (SOF) documents compliance with these NPS wetland protection procedures.

## **PROPOSED ACTION**

The proposed action is the construction of a major thoroughfare artery extending and connecting Coley Road from McCullough Boulevard to Highway 78 (future Interstate 22), and Barnes Crossing Road from North Gloster Street to the same location on Highway 78. The size of the proposed road itself as it crosses park property will be approximately 700 feet long by 100 feet wide.

The project will serve as a connector between the heavily populated west side of Tupelo and fast growing retail area of Barnes Crossing on the north side of Tupelo. This road will also function to provide out of town traffic from west of the region access to the area. All motorists traveling from the west side of town to the Barnes Crossing area currently have to come through town and travel down the heavily congested Gloster Street. The proposed project will include a grade separated crossing at the Natchez Trace Parkway, a grade separated interchange at Highway 78, and an at grade intersection at Mount Vernon Road. The route for the proposed road is primarily undeveloped farmland and crosses both Town Creek and Yonaba Creek. The total project length is a distance of approximately 23,200 ft. (4.4 mile).

The environmentally preferred alternative is Build Alternative 2, as outlined in the Environmental Assessment prepared for the Natchez Trace Parkway of the National Park Service. This alternative consists of building a bridge overpass at the Natchez Trace Parkway for the proposed new roadway.

The benefits to be provided by the construction of this facility are numerous. By providing an alternate access route to the north side of town, and specifically the Barnes Crossing retail district, this project would relieve much of the congestion on the existing routes to this area, which includes North Gloster Street as well as U.S. Highway 45. The first effect of this would be safer access to the area for all available routes. Also, the quicker access and reduced congestion provided by this project would result in more fuel efficiency and less pollution to the environment. This roadway would also serve as a collector for the current and future developments in the Mount Vernon area which currently have to travel an existing inadequate road. The City of Tupelo, in conjunction with the Mississippi Department of Transportation, has conducted a Benefit / Cost Analysis for the proposed project. Based on the benefit / cost ratio of 6.45 as calculated in the analysis, it would seem that the implementation of this project would provide needed and long lasting benefits for the citizens of Tupelo and the many commuters

from the surrounding region who come to this community to work or shop. The construction of the facility could also extend the life of the existing interchanges at U.S. Highway 78 and 45 and at U.S. Highway 45 and Barnes Crossing Road by alleviating congestion during peak hours and reducing levels of service. This facility would also reduce the amount of commuter and collector traffic using the Natchez Trace Parkway as a bypass to the busier routes in and around the City of Tupelo. As the City of Tupelo and surrounding areas continue to develop, the amount of traffic and congestion in this area will continue to increase, including local traffic on the Parkway. The completion of this loop bypass will be an effective way to alleviate existing traffic problems and also avoid future problems.

## **SITE DESCRIPTION – WETLANDS**

An on-site wetland delineation was performed May 12, 2008 by Richard Herring, PWS, CWB, of Herring Environmental, LLC, of Saltillo, Mississippi.

The proposed bridge site (Alternative 2) will impact herbaceous and forested wetlands within the Parkway. Cowardin wetland types and the area impacted (see page 12) are:

- Palustrine - Emergent - Persistent - Saturated - Partially Drained (3.36 Acres)
- Palustrine - Emergent - Persistent – Seasonally Flooded - Partially Drained (.90 Acres)
- Palustrine – Aquatic Bed – Rooted Vascular – Intermittently Flooded - Excavated (.03 Acres)
- Palustrine - Forested - Broad Leaved Deciduous - Intermittently Flooded - Partially Drained (0.15 Acres)

These wetlands are early successional stage wetlands resulting from the cessation of intensive agriculture and ROW mowing. The climax stage of these wetlands is expected to be Palustrine – Forested. Currently the herbaceous vegetation that dominates the wetlands includes sage grass (*Andropogon virginicus*), spearwort (*Ranunculus pusillus*), rushes (*Juncus* sp.), sprangletop grasses (*Leptochloa* sp.), and sedges (*Carex* sp.). Saplings of green ash (*Fraxinus pennsylvanica*) are beginning to become established at scattered locations throughout the wetlands.

## **Wetlands Functional Values Assessment**

These palustrine emergent, forested, and aquatic bed wetlands possess a variety of functional values. They help to attenuate the effects of flooding by acting as a storage reservoir for floodwaters emanating off adjoining agricultural fields. Once the floodwaters seep into the ground, they end up recharging underground aquifers which can be a source of drinking water for local communities. The wetlands also serve as a crucial, albeit narrow (400 feet wide), habitat corridor for wildlife. Wetlands generally provide greater forage and shelter opportunities for animal species of all types than do associated upland habitats. They also by definition feature a greater diversity of obligate and facultative wetland plant species. These plants, along with the

wetland's microbial community, filter out many of the nutrients, sediments, and pollutants that wash in off the adjoining parkway motor road and nearby farm fields. Finally, the hydric sediments in which the plants and microbes thrive tend to be calcareous in this section of the state, which makes them particularly alkaline and productive. Although a formal and comprehensive wetland delineation has yet to be performed throughout the park, these wetland types are observed to be abundant within the Natchez Trace Parkway.

There are no known rare, threatened, or endangered species or critical habitat present in this area of the park. However, either one of Build Alternatives 2 or 3 (as detailed in the associated Environmental Assessment), if implemented, would necessarily result in the permanent conversion of a certain acreage of wetlands to roadway and supporting road prism. Alternative 2 (the park-preferred alternative), which would bridge the new roadway over the parkway motor road, would convert 4.4 acres of wetlands. Alternative 3, which would bridge the parkway over the new roadway, would require more disturbance and convert nine acres of wetlands. Converted wetlands would lose all of their physical, biological, and aesthetic functions and values, though this loss would be mitigated through the restoration of at least twice as large of a palustrine class wetland area in other areas of the park (see "Mitigative Actions" section).

## **WETLAND DISTURBANCE**

Under Build Alternative 2, approximately 4.44 acres of wetlands would be permanently filled to allow for construction of the proposed roadway section. Under Build Alternative 3, approximately 9 acres of wetlands would be permanently filled to allow for construction of the proposed roadway section due to the bridge approaches required along the Parkway alignment.

## **JUSTIFICATION FOR USE OF THE WETLANDS**

As mentioned earlier, the project is proposed to provide relief of existing and anticipated future congestion of existing roadways in the area, providing safer travel routes in the immediate and surrounding areas, improved fuel efficiency and less pollution to the environment. There is no available alternative as analyzed in the Environmental Assessment to connect the roadway termini without impacting the wetlands in this study. Alternative 4 which would re-route the alignment through the Beech Springs Road residential area would not be viable for several reasons as identified in the E.A. In addition to the fact that it would be cost prohibitive, it would also create safety concerns and noise impacts associated with the routing of thoroughfare traffic through a heavily populated rural residential setting. Also due to the length and alignment of this alternative more vegetation would be disturbed and potentially more Army Corps of Engineers wetlands would be impacted.

## **INVESTIGATION OF ALTERNATIVE SITES**

The only other feasible action alternative as analyzed in the E.A. would be for the Natchez Trace to pass over the proposed new roadway (Build Alternative 3). Not only would the new roadway alignment continue to pass through the subject area, the raised profile required along the Natchez Trace Parkway alignment would impact additional sections of wetlands. The other alternatives examined in the E.A. are "No

Action or No Build" (No Action Alternative 1) which is self explanatory and (Build Alternative 4) which is consists of replacing an existing underpass at the intersection of Beech Springs Road and the Natchez Trace Parkway and the reconstruction of Beech Springs Road from the connection of the new roadway to the intersection at North Gloster Street.

## **MITIGATIVE ACTIONS**

Design considerations are sensitive to the historic importance of the Natchez Trace Parkway.

### **Wetland Mitigation**

Under the preferred alternative, a new roadway would be built connecting Coley Road and Barnes Crossing in north Tupelo. The new connector road is needed to alleviate problematic traffic congestion in the rapidly expanding commercial district of Barnes Crossing. Also, the new road would provide a more direct and alternative route for people who are currently using the Natchez Trace Parkway in order to get to Barnes Crossing. Consequently the amount of non-recreational traffic using the parkway should lessen in time. It is not feasible for a new road connecting east and west Tupelo to avoid the parkway. The Natchez Trace spans the length of Tupelo (and in fact spans nearly the length of Mississippi). However, the new roadway would make its crossing where the parkway is relatively narrow (800 feet), thus minimizing disturbance. Unfortunately, this area of the city is located in a widespread floodplain with wetlands predominating in the remaining natural areas. In order to minimize disturbance to the existing wetlands in the project area and lessen overall environmental impacts, an erosion and sediment control plan will be prepared and included in the construction plans, and disturbance of woody and herbaceous vegetation will be minimized to the greatest extent practicable. All areas disturbed by construction activities will be re-vegetated with native, park-approved species at the conclusion of the project. The approach roads and bridge (under the preferred alternative) have been designed to have the least development footprint possible, while still maintaining required traffic safety and engineering standards.

Wetland mitigation is proposed to compensate for the approximately 4.5 acres of impacts associated with implementing the preferred alternative. Mitigation is proposed within the Natchez Trace Parkway. Park staff have located three sites adjacent to the parkway motor road at mileposts 127.5, 228.5, and 267 (see attached maps) which total approximately nine acres in size. Five of these acres are classified as palustrine/emergent/non-tidal/seasonally flooded. The other four acres are classified as palustrine/scrub-shrub/non-tidal/seasonally flooded. All of the wetland sites, both in the project area and the mitigation locations, have been managed until recently through semi-regular mowing or cultivation when conditions allowed (i.e., when the ground was not too saturated). The mitigation sites are proposed for restoration to palustrine class wetlands. In Mississippi, wetlands tend toward a forested state when human disturbance activities are removed. As soon as the project is approved, the mitigation areas would be allowed to re-vegetate naturally, with native hydrophytic species being added if necessary to speed the process. It is anticipated to take approximately two years for the emergent wetland areas to become fully functional, and approximately five years for the scrub-shrub-forested wetland mitigation areas, assuming average rainfall patterns persist (fifty-three inches per year

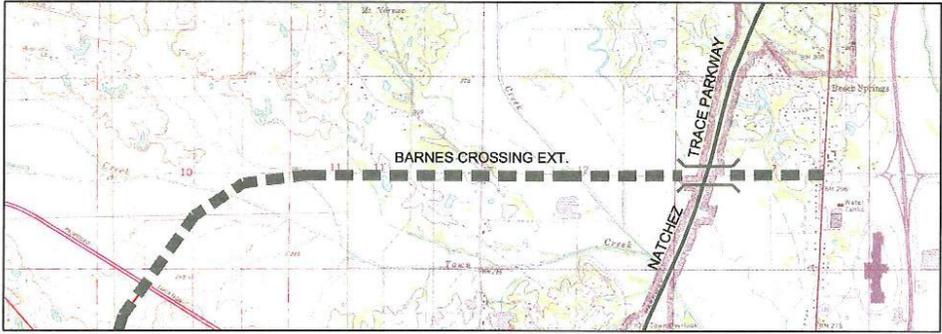
on average). A fully functioning wetland will provide quality forage and shelter to a biodiverse community of plants, animals, and microorganisms. It will also act as a sponge to soak up floodwaters and thus protect the parkway motor road and adjoining private property. During flooding and rainfall events, pollutants will be filtered from the water by biotic and abiotic factors, leading to cleaner water percolating down through the soil to collect as purified groundwater.

## **CONCLUSION**

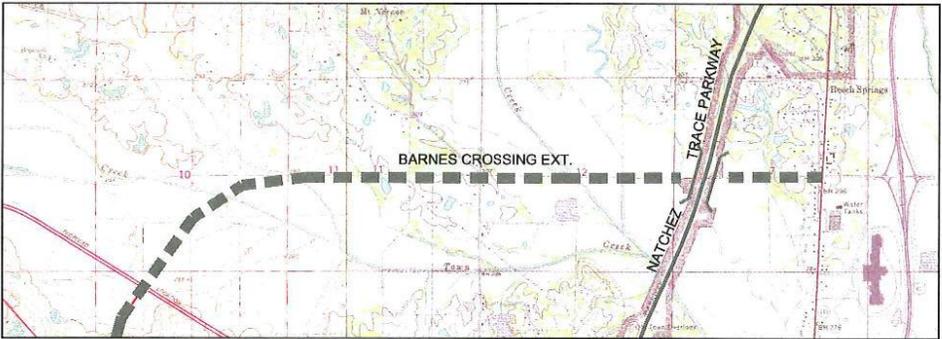
There is no practical alternative to the construction of the new Natchez Trace overpass to connect Coley Road Extended with Barnes Crossing Road. The preferred alternative would greatly reduce hazardous travel conditions, fuel consumption, and pollution. Mitigation and compliance with regulations and policies to prevent impacts to wetlands, water quality, and loss of property or human life would be strictly adhered to during and after construction. Individual permits with other federal and cooperating state and local agencies would be obtained prior to construction activities. No long-term adverse impacts to park wetlands as a whole would occur from the Preferred Alternative. The proposed compensation, allowing nine acres of previously mowed wetlands to recover to palustrine emergent and scrub-shrub wetlands as compensation for the proposed 4.44 acres of wetland impact, represents a 2:1 compensation ratio. Therefore, the National Park Service finds the Preferred Alternative to be acceptable under Executive Order 11990 for the protection of wetlands.

## **REFERENCES**

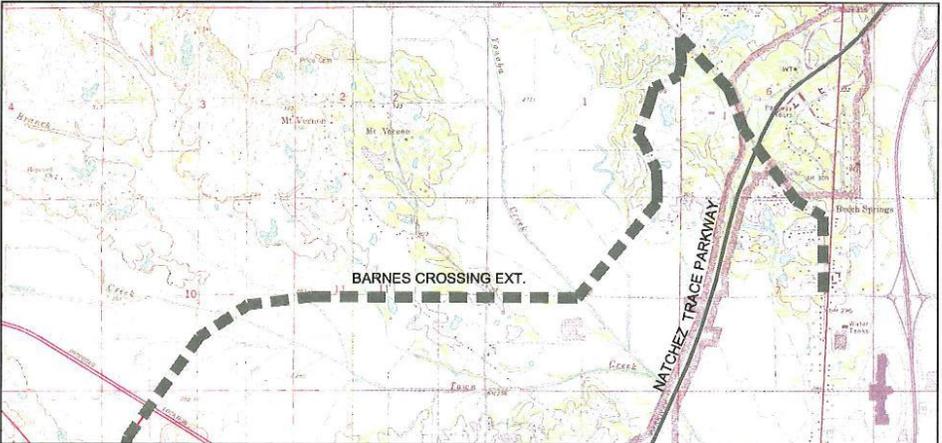
- Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. U.S. Fish and Wildlife Service Report FWS/OBS-79/31.
- National Park Service, U.S. Department of Interior. 2002. NPS Directors Order #77-1: Wetland Protection. Washington, D.C.
- National Park Service, U.S. Department of Interior. 2008. NPS Procedural Manual #77-1: Wetland Protection. Washington, D.C.



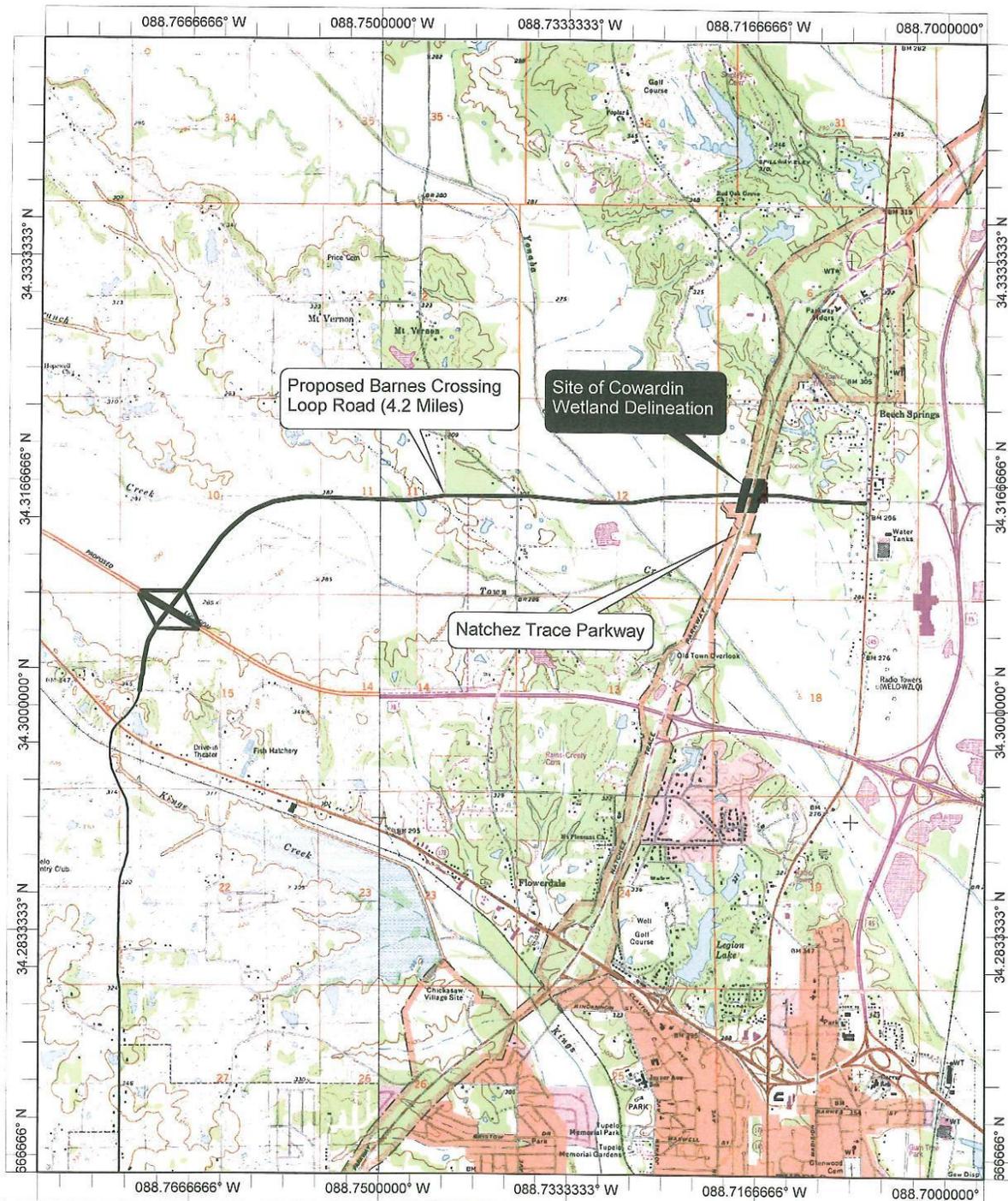
ALTERNATIVE 2



ALTERNATIVE 3



ALTERNATIVE 4



Name: TUPELO  
 Date: 6/3/2008  
 Scale: 1 inch equals 3333 feet  
 Location: 034.3074400° N 088.7382157° W NAD27  
 Caption: Exhibit A  
 Site of Cowardin Wetland Delineation  
 Herring E for ESI

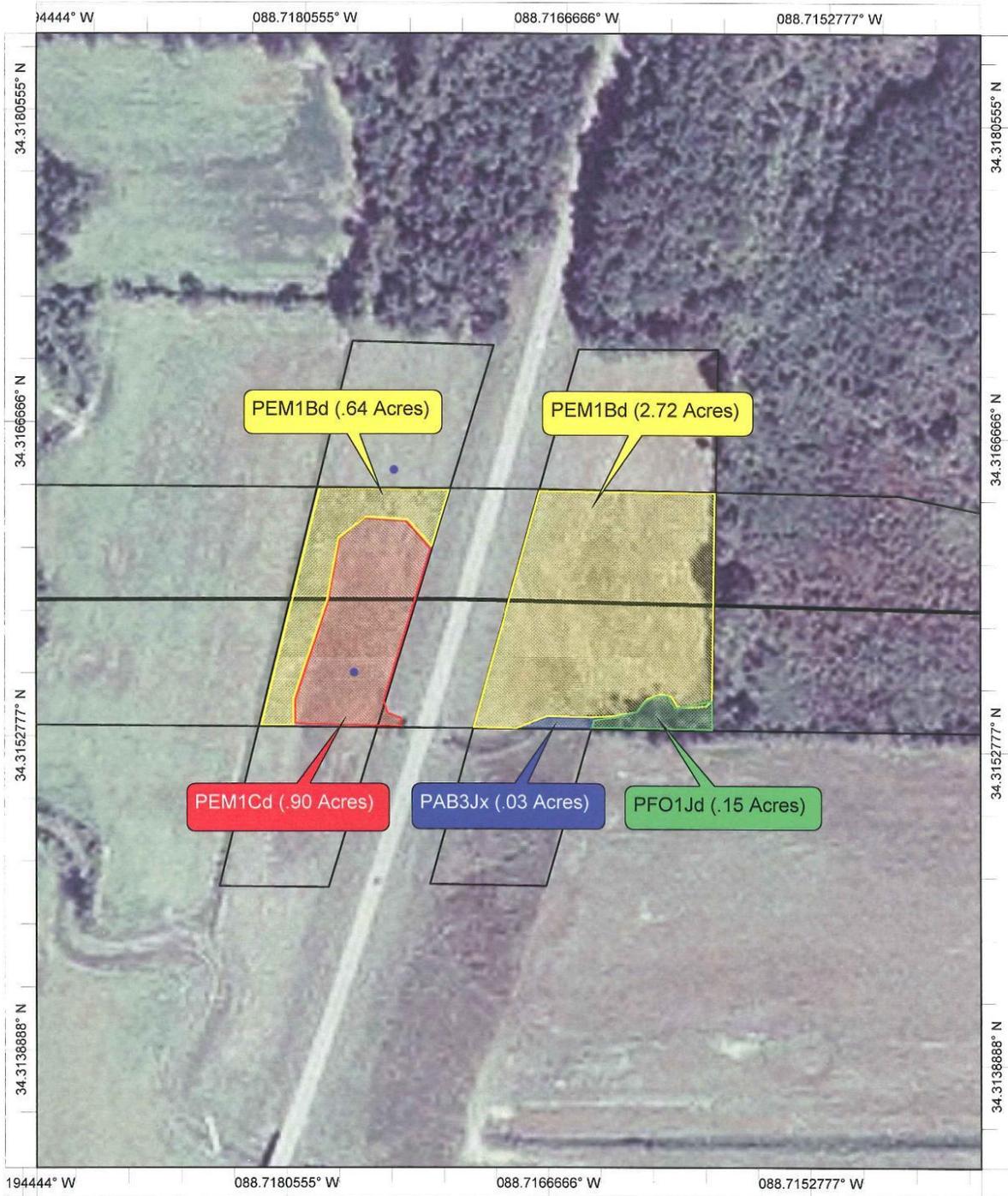
Datum: NAD27

Copyright (C) 1997, Maptech, Inc.





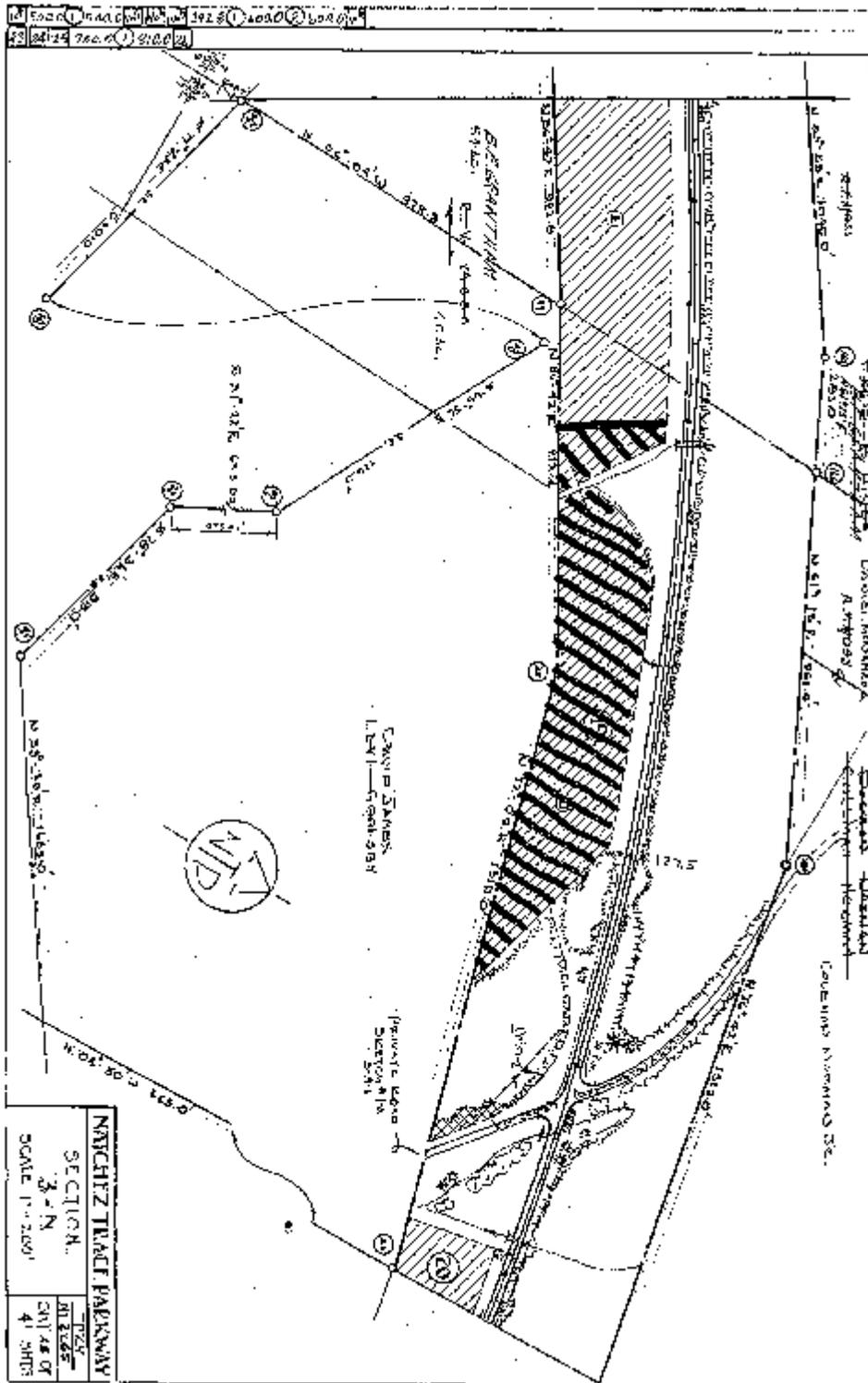




<p>Name: TUPELO NW, MS          Date: 6/18/2008          Scale: 1 inch equals 200 feet</p>	<p>Location: 034.3159129° N 088.7169281° W NAD27          Caption: Exhibit G          Cowardin Wetlands in Parkway          Herring E for ESI</p>
--	---

Datum: NAD27 Copyright (C) 2007, Maptech, Inc.

MP 127.4 (4 ac)



 = Wetland mitigation area





## **Appendix C- Statement of Findings-Floodplains**

**STATEMENT OF FINDINGS FOR EXECUTIVE ORDER 11988  
FLOODPLAIN MANAGEMENT**

**FOR**

**COLEY EXTENDED/BARNES CROSSING EXTENDED  
ROADWAY PROJECT**

**@**

**NATCHEZ TRACE PARKWAY  
TUPELO, MS**

\_\_\_\_\_  
**Recommended  
Superintendent, Natchez Trace Parkway**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Certified for Technical Adequacy and Servicewide Consistency  
Chief, WASO Water Resources Division**

\_\_\_\_\_  
**Date**

\_\_\_\_\_  
**Approved  
Director, Southeast Region, NPS**

\_\_\_\_\_  
**Date**

## **INTRODUCTION**

Executive Order (EO) 11988 (“Floodplain Management”) requires the National Park Service (NPS) and other agencies to evaluate the likely impacts of actions in floodplains. It is NPS policy to preserve floodplain values and minimize potentially hazardous conditions associated with flooding. If a proposed action is in an applicable regulatory floodplain, then flood conditions and associated hazards must be quantified, and a formal Statement of Findings (SOF) must be prepared. The NPS *Procedural Manual (PM) #77-2, Floodplain Management* provides direction for the preparation of a floodplain SOF. This SOF has been prepared to comply with EO 11988 and with PM #77-2.

## **PROPOSED ACTION**

The proposed action is the construction of a major thoroughfare artery extending and connecting Coley Road from McCullough Boulevard to Highway 78 (future Interstate 22) and Barnes Crossing Road from North Gloster Street to the same location on Highway 78, all located within the city limits of Tupelo, Mississippi.

The project will serve as a connector between the heavily populated west side of Tupelo and the fast growing retail area of Barnes Crossing on the north side of town. This road will also function to provide out of town traffic from west of the region access to the area. All motorists traveling from west Tupelo to the Barnes Crossing area currently have to come through town and travel down heavily congested Gloster Street. The proposed project will include a grade-separated crossing at the Natchez Trace Parkway, a grade-separated interchange at Hwy 78, and an at-grade intersection at Mount Vernon Road. The route for the proposed road is primarily through undeveloped farmland and crosses both Town Creek and Yonaba Creek. The total project length is approximately 23,200 feet (4.4 miles).

The environmentally preferred alternative is Alternative 2, as outlined in the Environmental Assessment (EA) prepared for the Natchez Trace Parkway of the National Park Service. This alternative consists of building a bridge overpass at the Natchez Trace for the proposed new roadway. As Tupelo and the surrounding area have continued to develop, the amount of traffic and congestion on the Parkway has increased concurrently. The new roadway is expected to reduce the amount of commuter and collector traffic using the Parkway as a bypass to the busier routes in and around the City of Tupelo. This should improve the traveling experience for the visitor utilizing the Parkway as a destination in and of itself.

## **FLOODPLAINS DESCRIPTION**

According to National Flood Insurance Program maps, the proposed project intersects the Natchez Trace Parkway within a 100-year floodplain. The floodplain extends to the east and west far beyond park boundaries. The amount of floodplain located within the park that is affected by this project is approximately 800 feet by 300 feet, or approximately 4.4 acres. Currently, in addition to the asphalt Parkway and associated mowed shoulders along the elevated road prism, park property supports herbaceous vegetation including sage grass (*Andropogon virginicus*), spearwort (*Ranunculus pusillus*), rushes (*Juncus species*), and sedges (*Carex sp.*). Saplings of green ash (*Fraxinus pennsylvanica*) are beginning to become established at scattered locations.

## **JUSTIFICATION FOR USE OF THE FLOODPLAINS**

This project has been proposed to provide relief from existing and anticipated future congestion of existing roadways in the area, provide safer travel routes in the immediate and surrounding areas, and improve fuel efficiency and lessen pollution by lessening travel times. There is no practical alternative, as analyzed in the Environmental Assessment, to connect the roadway termini without crossing the Natchez Trace Parkway and impacting the floodplain present on park property. (The Parkway runs north to south and splits modern day Tupelo east to west.)

## **INVESTIGATION OF ALTERNATIVE SITES**

Other action alternatives were examined in the EA. Alternative 3 provides for the Natchez Trace Parkway to bridge over the proposed new roadway. Under this alternative, not only would the new roadway alignment continue to pass through park property, but the raised profile required for the Parkway bridge would impact additional acres of floodplain to the north and south of the crossing.

Alternative 4, which would re-route the alignment through the Beech Springs Road residential area, would not be viable for several reasons examined in detail in the EA. In addition to the fact it would be cost prohibitive, it would also create safety concerns and noise impacts associated with the routing of thoroughfare traffic through a heavily populated residential setting. Also, due to the length and alignment of Alternative 4, more vegetation project-wide would be disturbed and potentially more jurisdictional wetlands and floodplains would be impacted.

## **HYDROLOGIC RISK**

Conditions associated with flooding in the proposed project location are not considered particularly hazardous. Depths of flow during the 100-year flood are relatively low, generally not exceeding one foot in height. Velocities are predicted to be very slow due to a low, nearly horizontal gradient. There are no major waterways in the project area, so any flooding is expected to occur slowly. Both the Parkway and proposed road prisms are designed with culverts to allow accumulated water to flow under the roads rather than rise up and destabilize the roadbeds. (The Parkway itself has never experienced problems with flooding in this area.) Land adjoining the existing and proposed roadways is primarily agricultural or fallow in nature.

## **MITIGATIVE ACTIONS**

Design considerations for the proposed roadway are sensitive to the historic and scenic importance of the Natchez Trace Parkway.

In order to minimize disturbance to the floodplain present in the project area, and the environment in general, an erosion and sediment control plan will be prepared and included in the construction plans. Disturbance of woody and herbaceous vegetation will be minimized to the fullest extent possible. All areas disturbed by construction activities adjacent to the new roadway itself will be revegetated with native plant species.

Any possible flooding risks associated with the proposed project will be minimized as a result of implementing design procedures that strive for a near no-rise condition impact by providing adequate openings for existing channels and floodways. Any impacts to the floodplain should be minimal due to the agricultural and natural character of the area. The local floodplain manager has been consulted to ensure that the proposed action is consistent with existing watershed and floodplain management programs. The project has also been cleared through state and federal emergency management agencies.

## **CONCLUSION**

There is no practical alternative to the construction of the new Natchez Trace Parkway overpass to connect Coley Road Extended with Barnes Crossing Road. The preferred alternative would greatly reduce hazardous and congested travel conditions on existing roads (including the Parkway itself, thus improving the visitor experience), and cut down on fuel consumption and pollution due to decreased travel times within the city. Mitigation and compliance with regulations and policies to prevent negative impacts to floodplains and other environmental values, as well as loss of property or human life, would be strictly adhered to during and after construction. Individual permits with other federal and cooperating state and local agencies would be obtained prior to commencing construction activities. No long-term adverse impacts to park floodplains as a whole would occur from implementing the preferred alternative. Therefore, the National Park Service finds the preferred alternative to be acceptable under Executive Order 11988 for the protection of floodplains.

